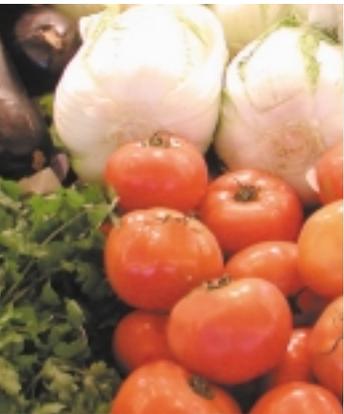


# 1999 CANCER IN NEW HAMPSHIRE, 1999



## AN ANNUAL REPORT ON CANCER INCIDENCE AND MORTALITY

New Hampshire Department of Health and Human Services  
Office of Community and Public Health  
Division of Epidemiology and Vital Statistics  
Bureau of Health Statistics and Data Management



# **CANCER IN NEW HAMPSHIRE, 1999**

An annual report on cancer incidence and mortality

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**Donald L. Shumway, Commissioner**  
Department of Health and Human Services

**Kathleen A. Dunn, Director**  
Office of Community and Public Health

A Publication of the  
New Hampshire Department of Health and Human Services  
Office of Community and Public Health  
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June 2002

# CANCER IN NEW HAMPSHIRE, 1999

An annual report on cancer incidence and mortality

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\*Special thanks to Poshen Wang for layout and cover design.

This work was supported in part by grant number U75/CCU118722-01 from the Centers for Disease Control.

Understanding the burden of cancer in New Hampshire would not be possible without the enormous contribution of its Tumor Registrars (who identify, register, and maintain records of all cancer patients and report the information to the Cancer Registry). The Department of Health and Human Services would like to acknowledge the Registrars' commitment to completeness, accuracy, and integrity of cancer data. Without the dedication of these individuals, the pursuit of cancer control and prevention would be greatly compromised.

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# INTRODUCTION

Cancer is a heterogeneous group of diseases characterized by uncontrolled growth and spread of abnormal cells<sup>1</sup>. In 1999, there were 5,377 new cases of cancer diagnosed in New Hampshire. The various forms of cancer were responsible for 2,407 deaths among New Hampshire residents in 1999, comprising approximately 26% of all deaths. In 1998, cancer (all types combined) was the most common cause of death among adults 35 to 74 years and the second leading cause across all age groups in New Hampshire<sup>2</sup>.

Morbidity and mortality due to cancer are increasingly preventable through two types of strategies. Primary prevention strategies aim to reduce, usually through lifestyle change, the likelihood that a healthy individual will develop cancer. Alternatively, secondary prevention is accomplished by screening asymptomatic people to diagnose cancers at an early, more readily treatable stage<sup>3</sup>.

This report includes New Hampshire cancer incidence and mortality data from 1999 and a summary of incidence and mortality rates for the state covering the five years from 1995 through 1999. The report provides information on cancer of all types combined and the 23 cancer sites most frequently diagnosed in New Hampshire residents using incidence data acquired by the New Hampshire State Cancer Registry (NHSCR) and mortality data from the New Hampshire Bureau of Vital Records. For comparison purposes, national incidence rates are presented from the National Cancer Institute's (NCI) Surveillance, Epidemiology, and End Results (SEER) Program, SEER Cancer Incidence Public-Use Database, 1973-1998 using SEER Stat; and US white mortality rates are presented from the National Mortality Data Base (NMDB) using CDC WONDER provided by the National Center for Health Statistics. This information can be used at the state and county level to identify the burden of morbidity and mortality associated with each type of cancer. Combined with information on cancer prevention, early detection, and treatment, it is useful for program planning and policy development aimed at reducing the burden of cancer.

This report is organized into three major sections: an executive summary (included as a separate document in the inside front cover pocket), the main report, and appendices. The executive summary is a smaller version of the report, summarizing the overall cancer burden in New Hampshire, and is intended to stand on its own as a synopsis of the main report. The main report includes the information provided within the executive summary and provides more detail about each of the 23 main cancer sites. Each primary site is presented using incidence and mortality data and age-adjusted rates where appropriate. Information from the NCI and the American Cancer Society (ACS) on risk factors, age of onset, early detection and screening, and other relevant facts are also included when available. Results from statistical tests at the county level have been included when data are available and reliable. Within each of the 23 primary site summaries, there are icons identifying other data sources that provide information related to that specific cancer.

The last section of this report contains appendices to provide the reader with technical assistance regarding cancer coding, population weights, data quality, stage definitions, other considerations relevant to using cancer data, and sources for more cancer information. The implications on two most important changes in this report including the adoption of the 2000 US standard population for age-adjusted rates and the use of ICD-10 (International Classification of Disease, Tenth Revision) for 1999 mortality data are also provided in the appendix.

## New Features in this Report

- The use of 2000 US standard population as a reference group for age-adjusted rates. Unlike previous publications which were age-adjusted to the 1970 US standard population, the rates in this report are age-adjusted to the 2000 US standard population.
- A comparison of the weights for different age groups between 1970 and 2000 US standard population is provided in appendix for comparison purposes. Methods used to calculate age-adjusted rates are also provided.
- Unlike the use of ICD-9 coding for 1995-1998 mortality data, ICD-10 coding was used for 1999 mortality data.
- A comparison table of site codes including topography and morphology codes of ICD-O2 for site grouping in incidence and ICD-9 (1995-1998) and ICD-10 (1999) in mortality.
- A section on cancer prevention to illustrate the importance of prevention at different levels to reduce cancer burdens. Information on corresponding programs in each level is incorporated.
- Information from the New Hampshire Breast and Cervical Cancer Program (BCCP) is included to provide information about screening program for these two cancers.
- The use of SEER Cancer Incidence Public-Use Database, 1973-1998 for SEER incidence rate through SEER Stat; and the use of National Mortality Data Base (NMDB) for national mortality rate through CDC WONDER.
- The objectives from Healthy New Hampshire (HNH) 2010 were incorporated in the mortality trends whenever applicable.
- Trends of late stage diagnosis for female breast cancer over years were included to show the effectiveness of screening and early detection programs.
- Geographic Information System (GIS) mapping was used to illustrate rate differences between counties and the state as a whole for female breast and prostate cancers.
- A section for sources of additional information is included in the appendices.

## The Bureau of Health Statistics and Data Management (BHSDM)

The Bureau of Health Statistics and Data Management analyzes records of newly diagnosed cases of cancer (incidence data) and Vital Records death files and distributes statistical information from these records to community organizations, government agencies, and the general public. This information may be used to plan and evaluate public health programs and to assess cancer risk.

The tables and graphs in this report provide significant insight into the information available from records of both cancer incidence and mortality. The information presented is based on a consideration of data users' needs and a desire to provide information that is useful to the majority of readers. However, because of concerns about statistical reliability, the same detail cannot be presented for each of the primary sites described in this report. For instance, data for less common sites do not support reporting rates at the county level.

To request more detailed analysis of New Hampshire cancer data, or to obtain additional copies of this report, contact the Bureau of Health Statistics and Data Management, Department of Health and Human Services, 6 Hazen Drive, Concord, NH 03301, (603) 271-5926 or (800) 852-3345, Ext. 5926, or e-mail [healthstats@dhhs.state.nh.us](mailto:healthstats@dhhs.state.nh.us). Further information, as well as an electronic version of this report, is available on the BHSDM web site: [www.dhhs.state.nh.us/healthstats](http://www.dhhs.state.nh.us/healthstats).

## Data Sources

### *Incidence*

Statistical information on newly diagnosed primary cancers is reported to the New Hampshire State Cancer Registry (NHSCR). The NHSCR database is comprised of abstract information on reportable cancers from New Hampshire acute care hospitals and their tumor registries, medical records departments, oncology departments, physicians, and private pathology laboratories. The Registry has reciprocal agreements for exchange of case information with Massachusetts, Maine, Vermont, Rhode Island, Connecticut, New York, and Florida. The figures in this report are for newly diagnosed primary tumors, and not people newly diagnosed with cancer. It is possible that a single person could be represented multiple times in this report if they were diagnosed with more than one primary (non-metastasis) tumor. Health care facilities in New Hampshire are required to report all cancer cases that are seen for diagnosis or treatment under the "Chronic Disease Prevention, Assessment and Control Act", RSA 141-B: 1, 1985.

The data tables and figures in this report are based on invasive\* cancers only, with the exception of bladder cancer (nationally, the invasiveness of bladder cancer is determined inconsistently by physicians; as a result, the convention is to analyze all diagnoses together, including in situ cases). The tables and figures describing stage information are based on both invasive and in situ tumors. Cancer cases include all neoplasms covered by ICD-O2 (International Classification of Diseases on Oncology, 2nd edition) codes C00-C80. For more information regarding the ICD-O2 topography and morphology codes, please refer to Appendix A of this report.

\* Those tumors that have penetrated the basement membrane of the surrounding tissue, as opposed to in situ ("in place"), where penetration has not occurred.

Data are available 24 months after the close of the calendar year. For example, data for 1999 became available in January, 2002. The annual report is usually released 6 months after the data are available. Occasionally, problems with data acquisition and data management are encountered that delay the report's publication.

### ***Mortality***

Statistical information on deaths of New Hampshire residents is reported to the State Bureau of Vital Records (BVR) which collects records of all vital events that occur in New Hampshire. BVR also obtains copies of out-of-state records involving New Hampshire residents. For this report, death records were analyzed with an underlying cause of death coded as cancer as defined by ICD-9 codes 140-208 for years 1995-1998 and ICD-10 codes C00-C95 for year 1999.

Confidentiality of all of these records is of utmost concern and is protected by state statute. Strict rules have been adopted to protect the privacy of individuals, yet allow for analysis of these records and publication of statistical reports, which empower public health decision making.

### ***Survival Statistics***

Survival analyses on cancer involve a collection of statistical procedures for data analysis for which the outcome variable of interest is time until the case dies. This information is important for planning of cancer control activities and policy making because it provides the basis for evaluation of program effectiveness.

New Hampshire has not been collecting complete cancer incidence and mortality data for a long enough period to present reliable state-specific cancer survival data. Instead, this report presents national cancer survival statistics from SEER program. In the future, when enough data are available, New Hampshire specific data will be reported.

## **The New Hampshire State Cancer Registry (NHSCR)**

The National Cancer Institute (NCI), the American Cancer Society (ACS), and the Centers for Disease Control (CDC) indicate that overall cancer incidence rates appear to be decreasing. However, this estimate is based on SEER, which bases its estimates on a sample of 14% of the national population that does not include New Hampshire. The ACS estimates that the total number of cancer cases in New Hampshire will increase to over 5,800 in 2002. Without a central cancer registry, it would be impossible to determine if reductions in cancer rates occur in New Hampshire and if resources are being directed appropriately. Cancer surveillance is the key to a unified scientific and public health approach to fighting cancer. Data collected through the NHSCR, New Hampshire's statewide, population-based cancer registry, provide a basis for identification of cancer trends and patterns within the state. Since 1987, the NHSCR has been operated out of the Norris Cotton Cancer Center under a contract between the State and Dartmouth Medical School.

In 1984, national mortality statistics revealed that the number of cancer deaths in New Hampshire were above what was expected and above the national average each year from 1950-1979. As a consequence, individuals and organizations, including the New Hampshire Department of Health and Human Services and the ACS, helped create the Coalition Against Cancer. The efforts of this group subsequently lead to the promulgation of the State's Chronic Disease Prevention and Control Act, the establishment of the Governor's Advisory Panel on Cancer and Chronic Disease, and the designation of cancer as a reportable disease in the state.

In 1995, the NHSCR began to make enhancements to the registry infrastructure and to case ascertainment and quality assurance processes through their participation in the first round of the CDC's National Program for Cancer Registries (NPCR). The NPCR program was started to ensure that all states would have sufficient funding to establish and/or enhance cancer registries that met national standards. National central cancer registry standards are a composite of several cancer surveillance initiatives: the NCI SEER program, the American College of Surgeons Commission on Cancer (COC), and the NPCR program requirements. Data quality in NHSCR has made a significant improvement since 1995, due to CDC funding. The North American Association of Central Cancer Registries (NAACCR), in collaboration with these three programs, derives and publishes standards for timeliness, completeness, and quality of cancer registry data. In addition, NAACCR evaluates and certifies the quality of central cancer registry data for registries in North America, including most state registries in the US and all provincial/territorial registries in Canada. The NHSCR achieved the second highest, "silver" level of certification from the NAACCR for diagnosis year of 1999.

## Disparities on Race and Ethnicity

The Department of Health and Human Services (DHHS) is committed to presenting its data by race and ethnicity whenever possible. Race specific statistics are not provided in this report, because too few cases were reported to allow reliable analysis. Less than 1% of all newly diagnosed cancers and deaths due to cancer occurred among non-whites (this is consistent with the percentage of the non-white population in New Hampshire in the older age groups most affected by cancer). DHHS will continue to monitor the burden of cancer on minority populations and, if the numbers reliably support analysis by race and ethnicity, future reports will present those results. More information on racial/ethnic patterns of cancer can be found in the NCI publications<sup>4</sup>.

## Cancer Prevention

Several types of cancer can be prevented and the prospects for surviving cancer continue to improve. Cancer prevention is based on the natural history of the cancer development and can be regarded as having three levels.

*Primary prevention* – is to limit the incidence of cancer by controlling exposure to risk factors or increasing individuals' resistance to them (e.g., by vaccination or chemoprevention). Clearly, the first step is to identify the relevant exposures and to assess their impact on the risk of developing disease in the population. For example, lung cancer is largely attributable to smoking. Excess body fat and alcohol consumption can contribute to breast cancer. Consuming less dietary fat, while increasing fruit and vegetable consumption, can reduce the risk of contracting colorectal cancers. Physical activity and weight control also can contribute to cancer prevention. This report includes information from the 2000 NH Behavioral Risk Factor Surveillance System whenever possible and appropriate.



It indicates data from the 2000 New Hampshire Behavioral Risk Factor Surveillance System (BRFSS), a telephone survey of residents assessing risk behaviors and attitudes pertinent to health. Most data in this report are from the 2000 BRFSS findings unless otherwise specified.

*Secondary prevention* – refers to detection of cancer at an early stage, when treatment is more effective than at the time of usual diagnosis and treatment. With such measures it is possible to prevent the progression of the disease and its complications (including death). Screening represents an important component of secondary prevention. Screening involves tests to asymptomatic subjects in order to classify them as being likely or unlikely to have the disease that is the object of the screen. For example, sigmoidoscopic/colonoscopic exam can be used to detect colorectal cancer, and mammography and Pap smears are effective tools to detect female breast and cervical cancers. This report includes information from the NH Breast and Cervical Cancer Program whenever possible and appropriate.



Let No Woman Be Overlooked  
Breast and Cervical Cancer Screening

It indicates information from the NH Breast and Cervical Cancer Program (BCCP). The goal of BCCP is to reduce morbidity and mortality from these diseases in New Hampshire by providing regular free screening services to underserved women, case management through definitive diagnosis, quality assurance for every aspect of the program, and professional education. Because women over the age of 50 are least likely to seek screening and most likely to be diagnosed at later stages of breast and cervical cancer, free screening services are prioritized for women age 50-64.

*Tertiary prevention* – aims at improving the prognosis and quality of life of affected individuals by offering them the best available treatment and rehabilitation programs.

The ultimate goal of cancer prevention is to reduce the morbidity and mortality as a result of cancers. It is important to set up long-term objectives for achieving these goals through various cancer control activities. Objectives from the Healthy New Hampshire 2010 are included in this report whenever possible and appropriate.



It indicates goals of the Healthy New Hampshire 2010 (HNH 2010), New Hampshire's first disease prevention and health promotion agenda.

## FREQUENTLY ASKED QUESTIONS

**?** *I am interested in looking at cancer rates by year, but when I read the report, I find only 5-year rates. Why?*

**→** Rates need to be calculated with at least 20 events in the numerator. Calculating a rate based on less than 20 events in the numerator creates an unstable estimate that is not statistically reliable and varies greatly from year to year by chance alone. Therefore, generating rates based on small numbers can lead to misinterpretation. For this reason, 5 years of data are aggregated to create a more stable rate that can be used to compare cancer by type or by another variable of interest.

**?** *I would like to see the different types of cancer in my town, but cannot find this information in the report. Why doesn't this report show town-level data and where can I find this information?*

**→** New Hampshire is a small state with 234 cities and towns. In a given year, the number of newly diagnosed cancers or cancer deaths is too small to generate meaningful results on a town level. However, data are summarized by county to provide information that is more detailed than state level data. For information on a town level, please contact the Bureau of Health Statistics and Data Management at 603-271-5926.

**?** *I notice that in 1999 pancreatic cancer caused 128 deaths and 124 new cancer diagnoses. Are these events the same people? If so, can I make conclusions about the lethality of a certain type of cancer based on a death to new cases comparison?*

**→** Some of the deaths may be the same as the people diagnosed in the current year and some may have been diagnosed in previous years. Pancreatic cancer is usually not diagnosed until an advanced stage. Comparisons between the number of new cases diagnosed and the number of deaths can be used as a rough illustration of the lethality of a cancer type, given the typical stage of diagnosis, but should not be used as the sole source of mortality or survival rates for any cancer type.

**?** *I have noticed a lot of cancer cases on my street and in my town. Who can I contact at the state if I want this investigated further?*

**→** One out of every three Americans will develop some form of cancer in their lifetime and it is therefore not uncommon to see the occurrence of the disease in a neighborhood. However, there are rare circumstances where cancer clusters are observed. Please contact the Bureau of Health Statistics and Data Management (603-271-5926) for concerns on non-environmental cancer clusters. For environmentally related cancer cluster investigations, please contact the Bureau of Health Risk Assessment (603-271-4664) for advice and further investigation.

**?** *Where can I get more detailed information on cancer treatment, prevention, and research?*

**→** The Breast and Cervical Cancer Program (BCCP) can be reached at 603-271-4931 for information regarding female breast and cervical cancers. The National Cancer Institute is a good general resource for all types of cancer and can be reached at 1-800-4CANCER or <http://www.cancer.gov>, as well as the American Cancer Society at 1-800-ACS-2345 or <http://www.cancer.org>.

**?** *How is cancer defined in this report?*

➔ Cancer rates and case reports included in this report are invasive and malignant, except for bladder cancer where in situ cases are included (bladder cancer staging is difficult to determine and is performed inconsistently nationwide, therefore the convention is to analyze all cases). Data presented on the stage at which the cancer was diagnosed do include in situ cases where those cases are required to be reported. In New Hampshire, in situ cases of melanoma and cervical cancer are not reportable.

**?** *All of the rate information for the total population is identified as "age-adjusted." What does this mean and why is it done?*

➔ To compare groups where proportions of age groups are different, an adjustment needs to be made to make the age groups comparable. For example, the rate of lung cancer in New Hampshire may look higher than that of the United States. However, if New Hampshire has fewer younger people than the United States as a whole, its rate will appear higher. Once the two rates are adjusted to control for the differences in age distribution, the rates may not look different at all.

**?** *Throughout the report, SEER is mentioned. What is SEER?*

➔ The Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute collects and publishes cancer incidence and survival data from 11 population-based cancer registries and three supplemental registries covering approximately 14 percent of the U.S. population. Geographic areas were selected for inclusion in the SEER Program based on their ability to operate and maintain a high quality population-based cancer reporting system and for their epidemiologically significant population subgroups. The population covered by SEER is comparable to the general U.S. population with regard to measures of poverty and education. The SEER population tends to be somewhat more urban and has a higher proportion of foreign-born persons than the general U.S. population. SEER is used as the reference for national estimates of cancer diagnosis. NH data are not included in the SEER program.

**?** *I am interested in bone cancer, but I do not see mention of it in this report. Why? How do I get this information?*

➔ Bone cancer is a very rare condition and therefore is not included in the 23 primary cancer sites. Many other rare cancers are also excluded from this report because the numbers are too small for meaningful tabulations. If you would like analysis on any of these cancers, please contact the Bureau of Health Statistics (603-271-5926) for assistance.

**?** *This report summarizes data from 1999. It is now 2002. Why is there such a long time between data acquisition and publication?*

➔ Data are available 24 months after the close of the calendar year. For example, data for 1999 became available in January 2002. The annual report is usually released 6 months after the data are available. Cancer is a disease that tends to require many years to develop. For example, lung cancer typically is not diagnosed until at least 20 years after an individual starts smoking. Because of the long time period required for cancers to form, cancer incidence rates tend to change only slightly from one year to the next.

Staff in the NHSCR and of the reporting facilities communicate with each other to complete each case's reporting in a timely manner. However, delays in diagnosis, treatment, or out-of-state case submission can greatly affect a complete and accurate dataset being available. The BHSDM and NHSCR are committed to improving the timeliness of case reporting. The data included in this report are the most recently available data at the time of publication.

# SUMMARY OF ALL PRIMARY SITES

Table 1 – New Cases and Deaths by Sex and Primary Site, New Hampshire, 1999

	New Cases Diagnosed			Deaths		
	Male	Female	Total	Male	Female	Total
All Sites (includes sites not grouped below)	2,713	2,664	5,377	1,247	1,160	2,407
Bladder	210	81	291	39	27	66
Brain and other CNS	46	32	78	33	29	62
Breast (Female)		848			185	
Cervix Uteri		41			13	
Colon and Rectum	285	306	591	137	132	269
Corpus Uteri		158			25	
Esophagus	48	16	64	55	20	75
Hodgkin's Disease	22	19	41	6		6
Kidney and Renal Pelvis	69	42	111	23	20	43
Larynx	43	13	56	10	6	16
Leukemias	73	63	136	54	37	91
Liver	32	13	45	32	19	51
Lung and Bronchus	420	374	794	378	288	666
Melanomas of the Skin	124	120	244	20	20	40
Multiple Myeloma	33	20	53	16	17	33
Non-Hodgkin's Lymphomas	100	102	202	49	40	89
Oral Cavity and Pharynx	81	40	121	17	11	28
Ovary		87			60	
Pancreas	64	60	124	72	56	128
Prostate	764			119		
Stomach	47	26	73	26	18	44
Testis	39			3		
Thyroid	25	44	69	1	5	6

In 1999, there were 5,377 total cases of invasive cancer reported in New Hampshire (throughout the report, except for bladder cancer as explained in the Introduction, in situ cases are not included, except where staging is discussed). As shown in the above table, the most common forms of cancer are breast (32% of female cancers), lung (15% of all cancers), prostate (28% of male cancers), and colorectal (12% of all cancers). These four groups account for 56% of total cancers diagnosed.

The number of deaths due to cancer totaled 2,407 in 1999. Variation in early detection and treatment among cancer types results in deaths being more broadly distributed than diagnoses. Lung cancer was the most frequent cause of cancer death among both men (30%) and women (25%). Among other common forms of cancer, breast (16% of female cancer deaths), colorectal (11% of all cancer deaths), and prostate (10% of male cancer deaths), caused a lower proportion of deaths than the proportion diagnosed.

Table 2 – New Cases and Age-adjusted Incidence Rates by Sex and Primary Site, New Hampshire, 1995-1999, US (SEER) White 1997 Comparison Rates

	Male			Female			Total		
	NH Cases	NH Rate	1997 US (SEER)	NH Cases	NH Rate	1997 US (SEER)	NH Cases	NH Rate	1997 US (SEER)
<b>All Sites</b> (includes sites not grouped below)	13,333	552.4	543.4	12,938	427.9	428.3	26,171	477.3	472.8
Bladder	1,056	<b>45.2</b>	38.2	389	<b>12.5</b>	9.6	1,445	<b>26.4</b>	21.7
Brain and other CNS	231	8.7	8.3	178	6.0	5.9	409	7.3	7.0
Breast (Female)				4,091	137.7	139.6			
Cervix Uteri				249	8.2	9.0			
Colon and Rectum	1,599	<b>68.7</b>	64.3	1,546	<b>49.0</b>	46.0	3,145	<b>57.6</b>	53.8
Corpus Uteri				787	26.9	26.6			
Esophagus	233	<b>9.6</b>	7.1	86	<b>2.7</b>	1.9	319	<b>5.9</b>	4.3
Hodgkin's Disease	102	3.4	3.2	85	2.8	2.7	187	3.1	2.9
Kidney and Renal Pelvis	339	13.5	14.7	211	7.0	7.5	550	10.0	10.7
Larynx	243	<b>10.0</b>	7.0	63	<b>2.1</b>	1.5	306	<b>5.6</b>	3.9
Leukemias	353	<b>14.6</b>	16.4	282	9.2	9.7	635	<b>11.5</b>	12.5
Liver	137	5.7	6.6	61	<b>1.9</b>	2.7	198	<b>3.6</b>	4.4
Lung and Bronchus	2,166	<b>90.3</b>	78.7	1,762	<b>58.9</b>	51.7	3,928	<b>72.0</b>	62.9
Melanomas of the Skin	567	22.5	23.2	444	14.6	15.8	1,011	17.8	18.8
Multiple Myeloma	151	6.3	6.6	115	<b>3.7</b>	4.4	266	4.9	5.3
Non-Hodgkin's Lymphomas	496	<b>20.3</b>	23.8	443	<b>14.5</b>	16.1	939	<b>17.0</b>	19.6
Oral Cavity and Pharynx	401	16.2	16.3	197	6.6	6.7	598	10.9	11.0
Ovary				508	17.0	17.5			
Pancreas	286	12.1	12.1	303	9.8	9.3	589	10.8	10.6
Prostate	3,601	<b>150.1</b>	158.9						
Stomach	245	10.3	11.1	115	<b>3.6</b>	4.8	360	<b>6.5</b>	7.5
Testis	178	5.6	6.1						
Thyroid	79	<b>2.7</b>	3.7	199	<b>6.5</b>	9.9	278	<b>4.7</b>	6.8

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. New Hampshire rates in bold type are significantly different from the SEER rates at the 95% confidence interval.

Rates in New Hampshire are significantly **higher** compared to national (SEER) estimates for the following primary sites:

- Overall Population: Bladder, Colorectal, Esophageal, Larynx, Lung
- Male: Bladder, Colorectal, Esophageal, Larynx, Lung
- Female: Bladder, Colorectal, Esophageal, Larynx, Lung

Rates in New Hampshire are significantly **lower** compared to national (SEER) estimates for the following primary sites:

- Overall Population: Leukemia, Liver, Non-Hodgkin's Lymphoma, Stomach, Thyroid
- Male: Leukemia, Non-Hodgkin's Lymphoma, Prostate, Thyroid
- Female: Liver, Multiple Myeloma, Non-Hodgkin's Lymphoma, Stomach, Thyroid

Table 3 – Deaths and Age-adjusted Mortality Rates by Sex and Primary Site, New Hampshire, 1995-1999, 1997 US White Comparison Rates

	Male			Female			Total		
	NH Deaths	NH Rate	1997 US Rate	NH Deaths	NH Rate	1997 US Rate	NH Deaths	NH Rate	1997 US Rate
All Sites (includes sites not grouped below)	6,150	269.5	251.9	5,815	<b>185.8</b>	170.0	11,965	<b>218.7</b>	202.2
Bladder	195	9.0	7.8	111	<b>3.3</b>	2.4	306	<b>5.6</b>	4.6
Brain and other CNS	179	7.0	6.1	135	4.5	4.2	314	<b>5.6</b>	5.0
Breast (Female)				918	29.5	28.0			
Cervix Uteri				74	2.4	2.8			
Colon and Rectum	642	<b>28.3</b>	25.7	706	<b>21.8</b>	17.9	1,348	<b>24.7</b>	21.2
Corpus Uteri				149	<b>4.7</b>	2.0			
Esophagus	236	<b>9.9</b>	7.1	80	<b>2.5</b>	1.6	316	<b>5.8</b>	4.0
Hodgkin's Disease	21	0.9	0.6	14	-	0.5	35	0.6	0.6
Kidney and Renal Pelvis	146	6.2	6.5	112	3.6	3.1	258	4.7	4.6
Larynx	60	2.5	2.4	18	-	0.5	78	1.4	1.3
Leukemias	249	10.9	10.6	181	5.7	6.1	430	7.8	7.9
Liver	146	<b>6.3</b>	4.9	79	2.5	2.0	225	<b>4.1</b>	3.3
Lung and Bronchus	1,855	79.4	80.2	1,436	<b>47.1</b>	42.1	3,291	<b>60.3</b>	58.0
Melanomas of the Skin	103	4.3	4.4	68	2.2	2.1	171	3.1	3.1
Multiple Myeloma	101	4.3	4.6	88	2.7	3.0	189	3.5	3.6
Non-Hodgkin's Lymphomas	276	11.9	11.4	243	7.5	7.7	519	9.5	9.3
Oral Cavity and Pharynx	128	<b>5.5</b>	4.2	72	<b>2.3</b>	1.7	200	<b>3.7</b>	2.8
Ovary				296	9.6	9.3			
Pancreas	313	13.4	12.0	301	9.5	8.9	614	<b>11.3</b>	10.3
Prostate	652	32.5	31.1						
Stomach	153	6.8	6.3	83	2.5	3.0	236	4.3	4.4
Testis	10	-	0.3						
Thyroid	3	-	0.5	14	-	0.5	17	-	0.5

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

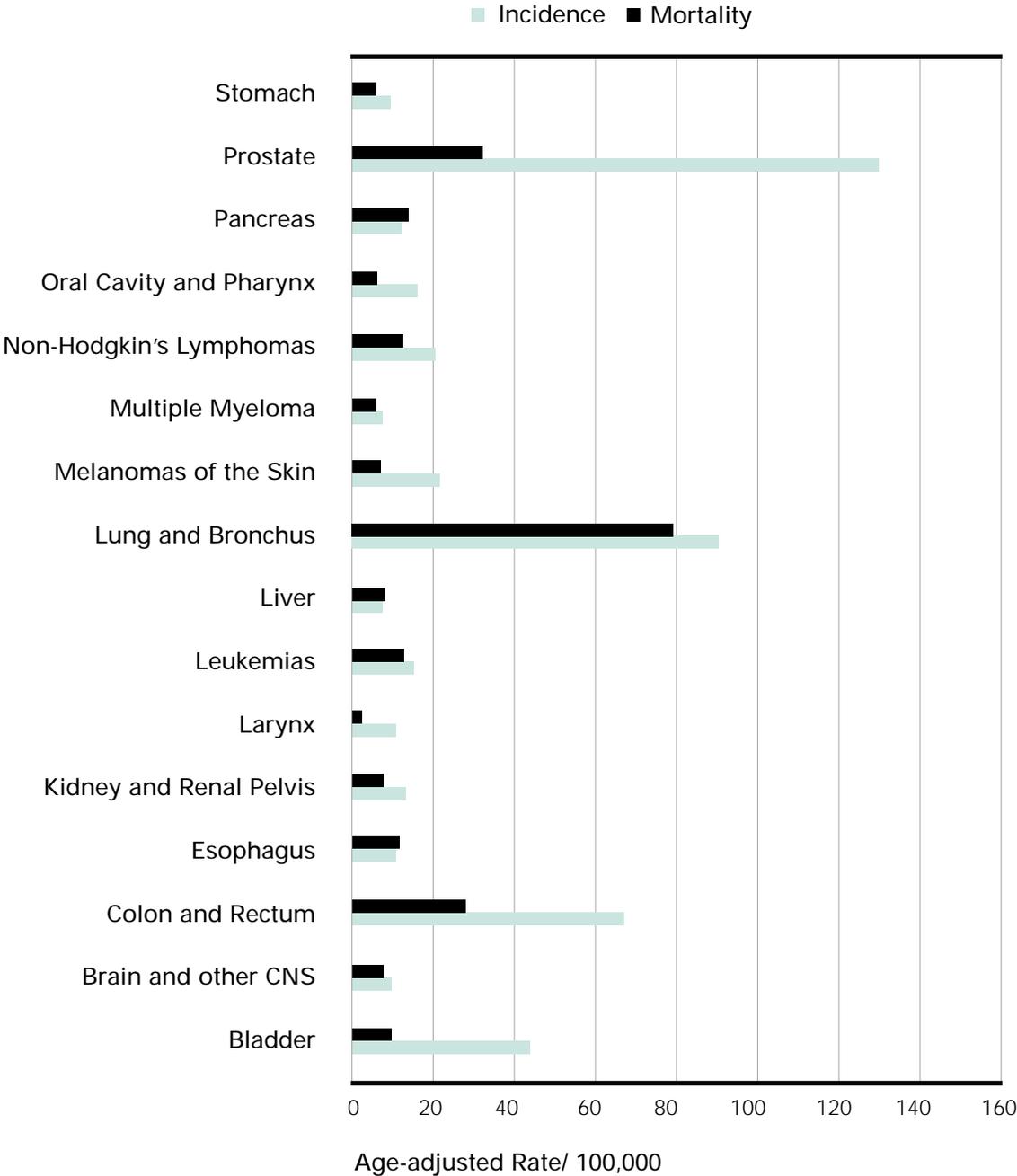
New Hampshire rates in bold type are significantly different from the National rates at the 95% confidence interval.

Rates in New Hampshire are significantly higher compared to national rates for the following primary sites:

- Overall Population: Bladder, Brain, Colorectal, Esophageal, Liver, Lung, Oral Cavity, Pancreas
- Male: Colorectal, Esophageal, Liver, Oral Cavity
- Female: Bladder, Colorectal, Corpus Uteri, Esophageal, Lung, Oral Cavity

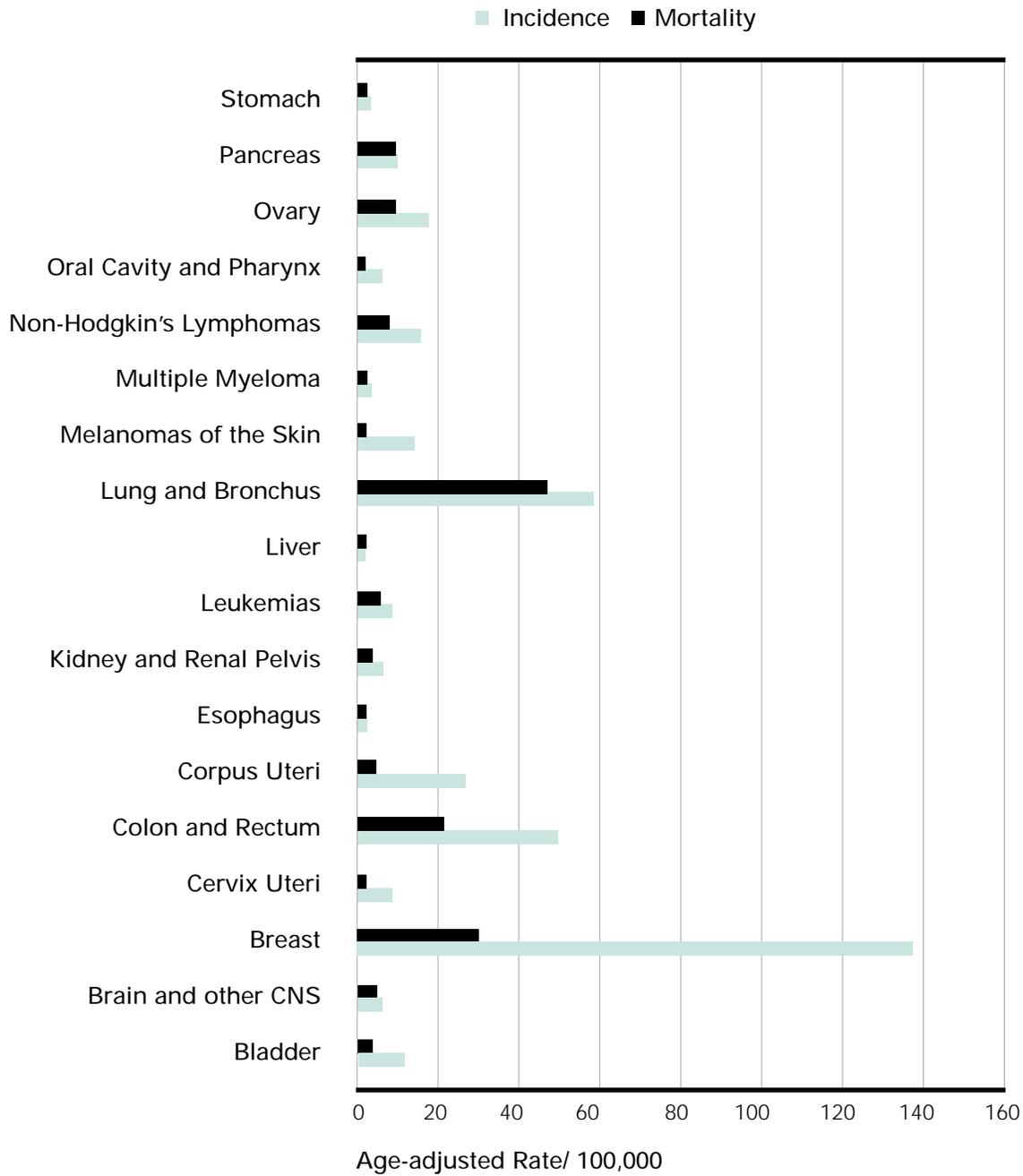
New Hampshire is not significantly lower in cancer mortality rates for any site when compared to national rates.

Table 4 – Male Age-adjusted Incidence and Mortality Rates for Selected Primary Sites, New Hampshire, 1995-1999



Note: The site groups above are those with 20 or more events over the five-year period.

Table 5 – Female Age-adjusted Incidence and Mortality Rates for Selected Primary Sites, New Hampshire, 1995-1999



Note: The site groups above are those with 20 or more events over the five-year period.

Table 6 – Distribution of Cancer Incidence and Mortality by Site and Sex, New Hampshire, 1995-1999

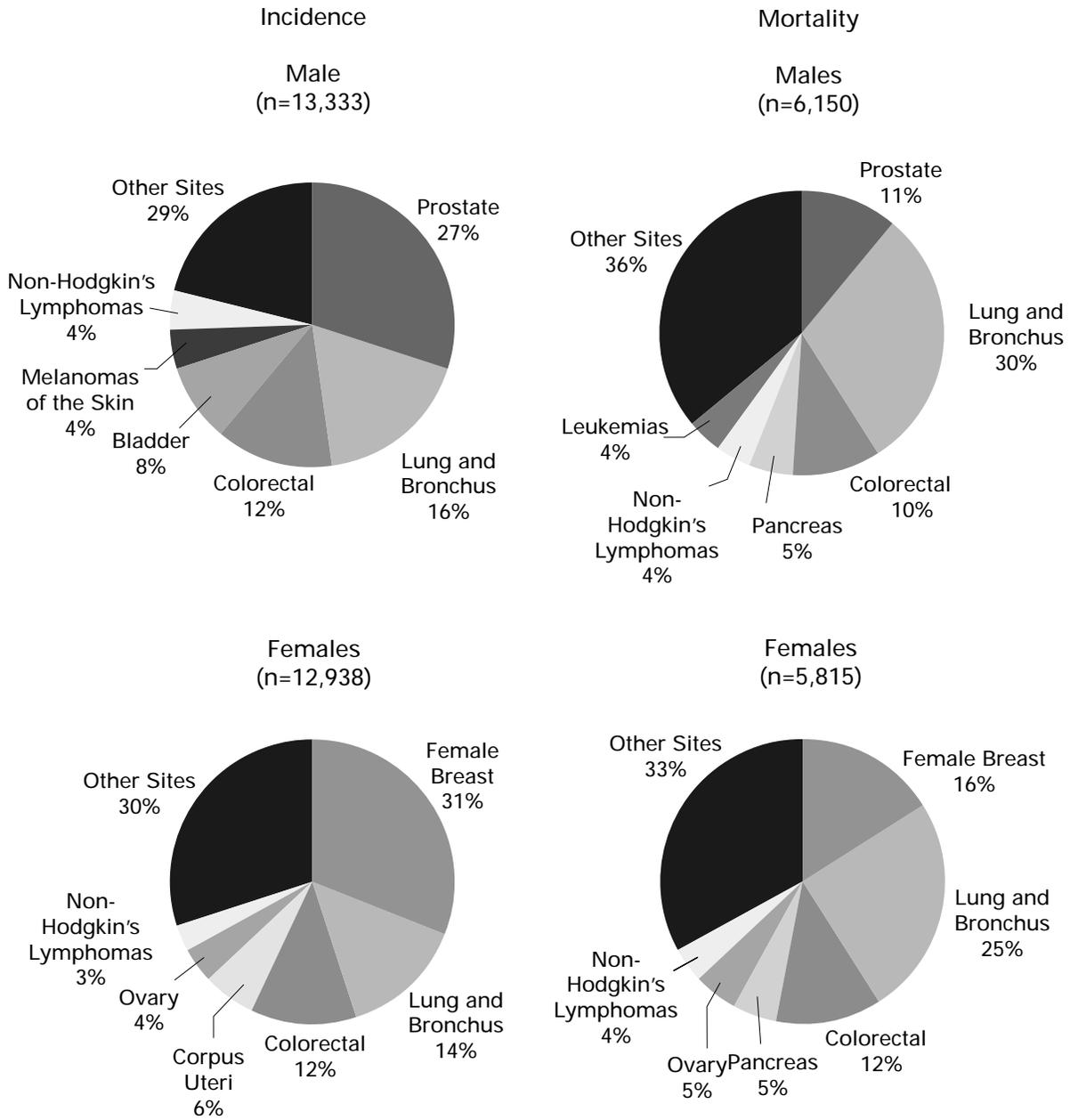


Table 7– New Cases by Sex, Age, and Primary Site, New Hampshire, 1999

Primary Site Group	<15	15-24	25-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
<b>Male</b>															
Bladder	0	0	3	5	3	6	14	15	18	36	36	31	23	20	210
Brain and other CNS	6	1	4	0	3	4	5	3	4	6	5	1	2	2	46
Colorectal	0	1	3	3	4	11	23	15	32	39	38	54	31	31	285
Esophagus	0	0	0	0	2	2	2	5	7	12	8	7	1	2	48
Hodgkin's Disease	1	3	8	3	1	2	0	1	1	2	0	0	0	0	22
Kidney and Renal Pelvis	0	0	1	1	9	3	8	9	8	8	8	5	6	3	69
Larynx	0	0	1	0	1	0	5	4	9	10	6	3	3	1	43
Leukemias	2	1	3	1	2	5	5	8	6	5	22	4	5	4	73
Liver	0	0	0	0	1	3	4	4	4	5	3	6	2	0	32
Lung and Bronchus	0	0	1	1	11	10	21	42	57	71	87	69	39	11	420
Melanomas of the Skin	0	1	7	4	16	10	16	11	9	12	12	10	6	9	124
Multiple Myeloma	0	0	0	1	1	1	2	6	1	9	2	4	1	5	33
Non-Hodgkin's Lymphomas	2	4	3	1	6	8	13	8	7	12	10	7	16	3	100
Oral Cavity and Pharynx	0	0	2	2	5	9	7	13	11	8	9	9	2	4	81
Pancreas	0	0	1	1	2	0	3	10	5	8	10	11	9	3	64
Prostate	0	0	0	1	5	12	56	93	113	138	171	103	49	23	764
Stomach	0	0	0	2	1	4	2	5	2	8	9	6	6	2	47
Testis	0	8	12	7	8	2	1	0	0	0	0	0	1	0	39
Thyroid	0	2	4	3	3	1	3	0	0	4	3	1	1	0	25
<b>Male Total of All Sites</b> (including sites not grouped above)	<b>16</b>	<b>29</b>	<b>54</b>	<b>43</b>	<b>89</b>	<b>108</b>	<b>198</b>	<b>271</b>	<b>309</b>	<b>417</b>	<b>460</b>	<b>362</b>	<b>225</b>	<b>132</b>	<b>2,713</b>
<b>Female</b>															
Bladder	0	0	1	2	2	1	4	8	6	10	8	11	14	14	81
Brain and other CNS	1	2	1	2	1	3	4	4	3	4	4	3	0	0	32
Breast (Female)	0	0	6	31	75	79	93	102	95	98	90	77	55	47	848
Cervix Uteri	0	0	1	6	8	6	2	4	1	5	2	1	4	1	41
Colorectal	0	1	1	5	5	6	22	20	23	32	40	48	51	52	306
Corpus Uteri	0	0	3	1	4	11	23	33	16	19	17	17	9	5	158
Esophagus	0	0	0	0	0	0	0	0	6	1	0	4	2	3	16
Hodgkin's Disease	1	1	9	2	1	1	0	0	0	0	2	1	0	1	19
Kidney and Renal Pelvis	0	0	1	3	2	1	3	3	7	5	6	4	6	1	42
Larynx	0	0	0	0	1	0	3	1	3	1	1	1	2	0	13
Leukemias	4	1	2	1	4	2	4	5	2	12	10	6	6	4	63
Liver	0	0	0	0	2	0	0	0	0	1	2	3	4	1	13
Lung and Bronchus	0	0	1	5	4	10	26	28	50	73	65	54	32	26	374
Melanomas of the Skin	0	0	20	10	14	15	17	8	8	3	7	6	5	7	120
Multiple Myeloma	0	0	0	0	0	1	2	1	3	2	2	6	1	2	20
Non-Hodgkin's Lymphomas	1	1	4	3	4	6	10	8	7	10	12	14	12	10	102
Oral Cavity and Pharynx	0	1	1	0	1	3	5	4	5	6	5	5	3	1	40
Ovary	0	1	4	2	5	12	9	4	7	14	9	8	8	4	87
Pancreas	0	0	0	2	2	3	8	5	3	4	9	9	7	8	60
Stomach	0	0	1	1	0	1	1	0	2	1	4	3	6	6	26
Thyroid	0	2	6	7	9	10	4	1	0	0	2	3	0	0	44
<b>Female Total of All Sites</b> (including sites not grouped above)	<b>9</b>	<b>11</b>	<b>66</b>	<b>90</b>	<b>151</b>	<b>176</b>	<b>250</b>	<b>251</b>	<b>256</b>	<b>316</b>	<b>317</b>	<b>308</b>	<b>243</b>	<b>220</b>	<b>2,664</b>

Table 8 – Deaths by Sex, Age, and Primary Site, New Hampshire, 1999

Primary Site Group	<15	15-24	25-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	Total
<b>Male</b>															
Bladder	0	0	0	0	0	0	2	1	3	3	6	11	5	8	39
Brain and other CNS	0	0	3	3	0	2	1	2	2	7	5	3	2	3	33
Colorectal	0	0	2	0	3	6	9	7	6	11	20	33	25	15	137
Esophagus	0	0	0	0	1	2	6	2	8	8	13	8	5	2	55
Hodgkin's Disease	0	0	0	0	0	3	0	0	0	0	0	1	1	1	6
Kidney and Renal Pelvis	0	0	0	0	0	0	5	5	1	3	1	2	3	3	23
Larynx	0	0	0	0	0	0	3	0	1	2	1	2	0	1	10
Leukemias	2	0	1	0	0	2	2	6	4	10	8	4	7	8	54
Liver	0	0	0	0	1	2	1	2	5	4	7	5	3	2	32
Lung and Bronchus	0	0	0	1	12	11	20	32	45	56	67	69	38	27	378
Melanomas of the Skin	0	0	0	2	1	2	0	2	0	4	3	2	3	1	20
Multiple Myeloma	0	0	0	0	0	0	2	3	1	2	0	4	3	1	16
Non-Hodgkin's Lymphomas	1	0	1	2	1	2	4	5	1	5	4	7	10	6	49
Oral Cavity and Pharynx	0	0	0	0	1	0	2	0	2	1	1	5	2	3	17
Pancreas	0	0	0	1	0	1	3	9	9	7	14	12	11	5	72
Prostate	0	0	0	0	1	0	2	2	3	5	19	23	25	39	119
Stomach	0	0	0	0	0	2	1	3	0	2	4	3	7	4	26
Testis	0	0	1	0	1	0	1	0	0	0	0	0	0	0	3
Thyroid	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Male Total of All Sites (including sites not grouped above)	5	0	8	9	25	38	75	91	106	158	195	219	167	151	1,247
<b>Female</b>															
Bladder	0	0	0	0	0	0	1	2	0	0	5	5	4	10	27
Brain and other CNS	1	0	1	0	2	2	3	4	3	4	4	3	1	1	29
Breast (Female)	0	0	0	4	7	13	18	22	12	15	25	21	19	29	185
Cervix Uteri	0	0	1	0	2	1	2	1	0	2	1	1	1	1	13
Colorectal	0	0	1	3	1	4	5	10	10	14	9	22	18	35	132
Corpus Uteri	0	0	0	0	2	0	3	4	2	2	3	5	2	2	25
Esophagus	0	0	0	0	0	0	1	0	5	1	3	5	0	5	20
Hodgkin's Disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kidney and Renal Pelvis	0	0	0	0	2	1	1	0	1	2	1	2	5	5	20
Larynx	0	0	0	0	0	0	1	0	0	2	1	1	1	0	6
Leukemias	1	1	0	0	2	1	1	2	4	3	2	3	10	7	37
Liver	0	0	0	0	1	2	1	1	1	1	3	3	4	2	19
Lung and Bronchus	0	0	1	1	4	9	16	20	26	48	62	44	27	30	288
Melanomas of the Skin	0	0	0	0	2	1	3	2	3	3	0	1	3	2	20
Multiple Myeloma	0	0	0	0	0	0	1	1	1	2	3	2	4	3	17
Non-Hodgkin's Lymphomas	0	0	0	0	2	1	1	4	0	3	3	8	7	11	40
Oral Cavity and Pharynx	0	0	0	0	0	0	1	3	1	0	0	0	2	4	11
Ovary	0	0	1	0	2	3	5	2	6	8	8	13	6	6	60
Pancreas	0	0	0	2	0	0	3	2	2	5	8	11	13	10	56
Stomach	0	0	0	0	0	1	1	0	0	0	5	3	1	7	18
Thyroid	0	0	0	0	0	0	0	0	1	1	1	0	1	1	5
Female Total of All Sites (including sites not grouped above)	2	1	7	11	36	41	73	87	89	128	163	168	152	202	1,160

# BLADDER

Bladder cancer is the most common location for malignancies in the urinary tract. About 90 percent of bladder cancers are transitional cell carcinomas; these are cancers that begin in the cells lining the bladder.

## Facts

- Age Most Often Affected: 60+
- Gender Most Often Affected: Male
- Survival Information: Survival depends greatly on the stage at which the cancer is discovered; with early diagnosis, 5-year survival rates are 95%. However, 5-year survival rates for later diagnosis of bladder cancer with distant metastases are 10-15%.

## Known Risk Factors

- Smokers are more than twice as likely to get bladder cancer compared to non-smokers.
- Occupational exposures to some aromatic and organic chemicals; for example textile industries, painters, chemical workers, and hairdressers.

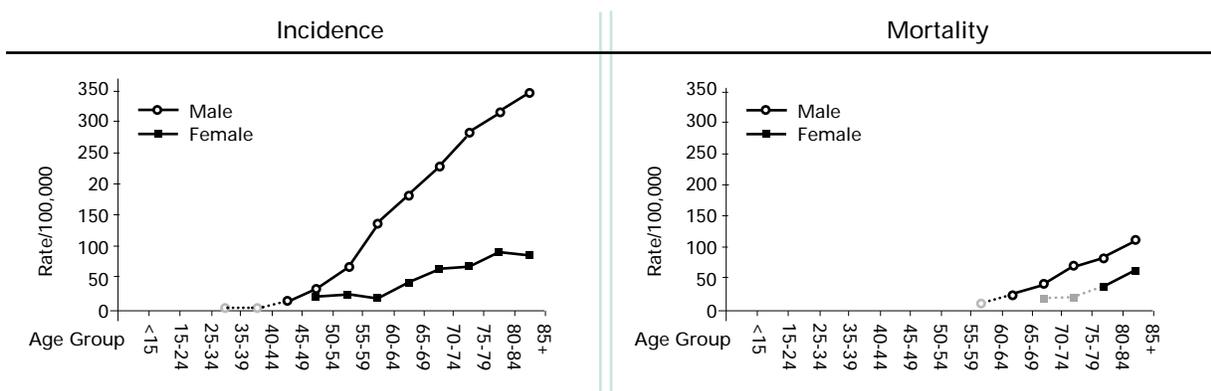


25% (95% CI:23.0-27.7) of NH adults are current smokers.

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997 SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	210	<b>45.2</b>	38.2	39	9.0	7.8
Female	81	<b>12.5</b>	9.6	27	<b>3.3</b>	2.4
<b>Total</b>	<b>291</b>	<b>26.4</b>	21.7	<b>66</b>	<b>5.6</b>	4.6

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval.

Bladder: Incidence and Mortality Rates by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

Bladder: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

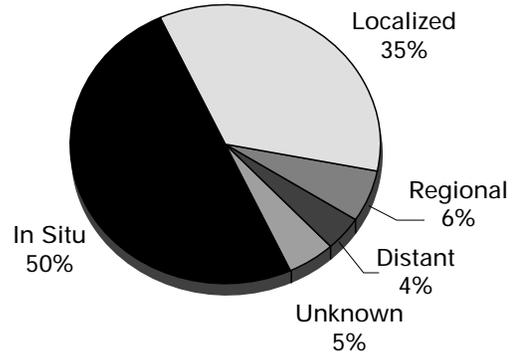
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	2	-	1	-	3	-	0	-	0	-	0	-
15-24	0	-	0	-	0	-	0	-	0	-	0	-
25-34	6	-	4	-	10	-	0	-	0	-	0	-
35-39	16	-	5	-	21	3.7	0	-	0	-	0	-
40-44	14	-	11	-	25	4.9	0	-	0	-	0	-
45-49	31	14.5	7	-	38	9.0	2	-	3	-	5	-
50-54	57	34.6	33	20.1	90	27.4	10	-	3	-	13	-
55-59	83	69.9	30	25.0	113	47.3	7	-	5	-	12	-
60-64	127	135.6	21	20.9	148	76.3	12	-	1	-	13	-
65-69	174	182.6	46	42.9	220	108.7	26	27.3	5	-	31	15.3
70-74	183	230.4	65	65.0	248	138.2	36	45.3	18	-	54	30.1
75-79	169	285.0	58	69.3	227	158.8	44	74.2	17	-	61	42.7
80-84	114	313.8	56	91.0	170	173.8	31	85.3	20	32.5	51	52.1
85+	80	348.4	52	84.5	132	156.2	27	117.6	39	63.4	66	78.1

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Bladder: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	14	8	22	2	3	5
Carroll	12	4	16	2	1	3
Cheshire	9	3	12	2	2	4
Coos	5	3	8	5	2	7
Grafton	16	3	19	5	3	8
Hillsborough	60	25	85	10	3	13
Merrimack	27	10	37	0	2	2
Rockingham	42	13	55	10	3	13
Strafford	18	8	26	1	4	5
Sullivan	7	3	10	2	4	6
State Total	210	81	291	39	27	66

Bladder: Stage at Diagnosis, 1999

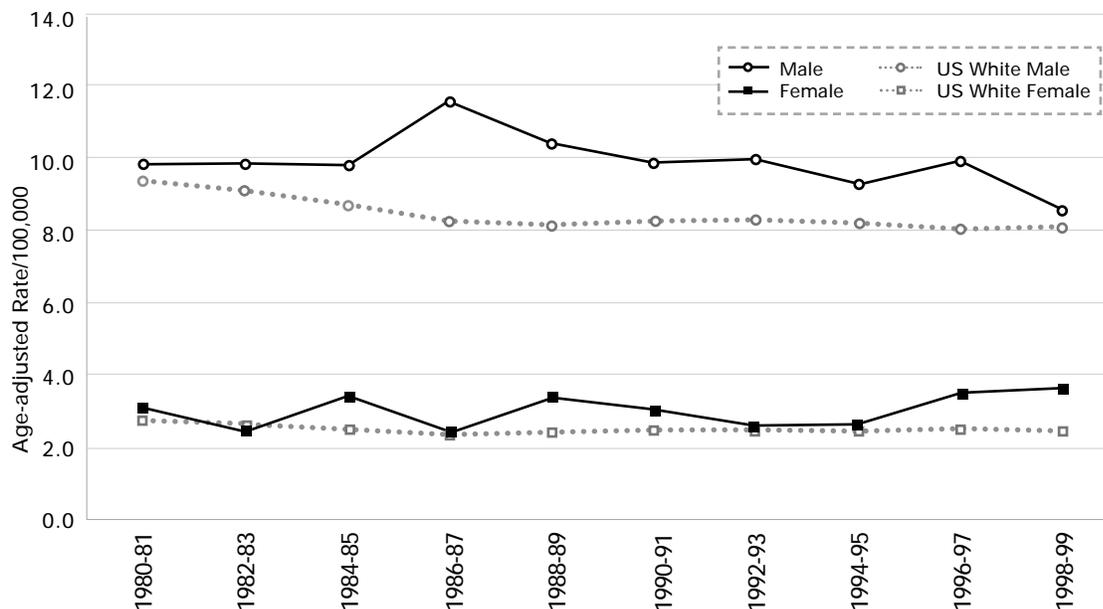


### Bladder: Age-adjusted Incidence and Mortality Rates by Sex and County, 1995–1999

County	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Belknap	65	47.5	26	14.6	91	29.3	10	-	6	-	16	-
Carroll	41	35.6	24	17.6	65	26.1	13	-	7	-	20	7.9
Cheshire	69	43.4	22	10.6	91	25.0	8	-	9	-	17	-
Coos	30	33.8	15	-	45	21.0	17	-	7	-	24	<b>10.7</b>
Grafton	75	44.4	29	13.0	104	26.5	17	-	11	-	28	7.0
Hillsborough	288	46.1	108	12.3	396	25.9	49	9.0	30	3.2	79	5.2
Merrimack	128	49.9	54	14.7	182	30.3	11	-	10	-	21	<b>3.4</b>
Rockingham	226	48.5	61	10.2	287	26.4	38	8.9	14	-	52	5.0
Strafford	84	40.9	39	14.1	123	25.5	20	10.5	11	-	31	6.5
Sullivan	50	50.2	10	-	60	26.3	12	-	6	-	18	-
<b>State Total</b>	<b>1,056</b>	<b>45.3</b>	<b>388</b>	<b>12.5</b>	<b>1,444</b>	<b>26.5</b>	<b>195</b>	<b>9.0</b>	<b>111</b>	<b>3.3</b>	<b>306</b>	<b>5.6</b>

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates in **bold** type are significantly different from the state rate at the 95% confidence interval. Rates are not displayed if fewer than 20 events were reported (noted as -).

### Bladder: Age-adjusted Mortality Rate Trends by Sex, 1980-1999



Note: Rates are two year averages and are age-adjusted to the 2000 US standard population. Neither the male nor female mortality rates are significantly different at the 95% confidence interval between the start and end of the period shown.

# BRAIN AND OTHER CENTRAL NERVOUS SYSTEM

These cancers include tumors of the brain and spinal cord. Brain cancer is the second most common cause of cancer after leukemia in children.

## Facts

- Age Most Often Affected: All ages
- Survival Information: Brain and CNS tumors are not staged like other types of cancer and survival rates depend on type of tumor. Survival time for patients with low-grade astrocytomas or oligodendrogliomas is approximately 6 to 8 years. Survival for patients with anaplastic astrocytomas is approximately 3 years. Survival for patients with glioblastomas is approximately 12 to 18 months.

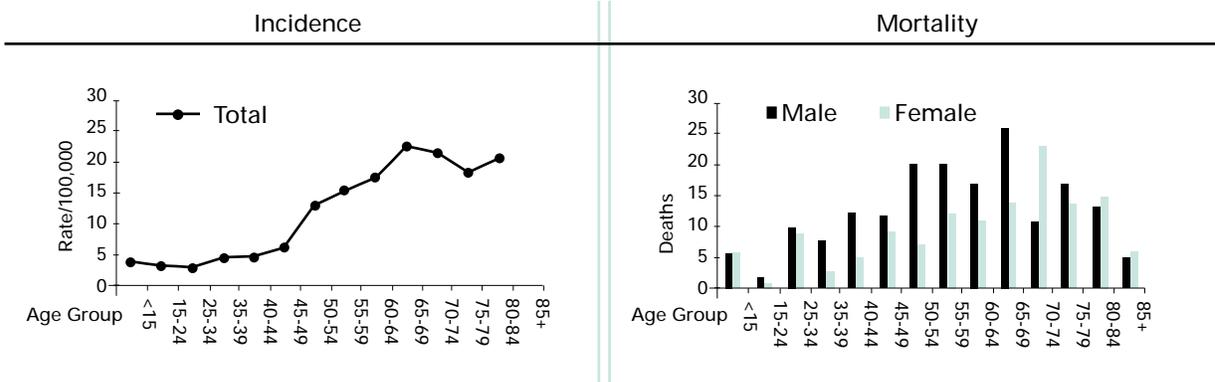
## Known Risk Factors

- Working in oil refining, rubber manufacturing, and drug manufacturing
- Possible hereditary component

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997 SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	46	8.7	8.3	33	7.0	6.1
Female	32	6.0	5.9	29	4.5	4.2
<b>Total</b>	<b>78</b>	<b>7.3</b>	<b>7.0</b>	<b>62</b>	<b>5.6</b>	<b>5.0</b>

Note: New Hampshire rates in bold type are significantly different from national rates at the 95% confidence interval

## Brain and other CNS: Incidence Rate and Mortality by Age and Sex, 1995-1999



Note: Actual number of events are plotted in place of rates for mortality, there were not enough reliable rates available to produce a meaningful chart.

Brain and other CNS: Age-specific Incidence and Mortality Rates by Sex, 1995–1999

Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	22	3.5	24	4.0	46	3.7	6	-	6	-	12	-
15-24	11	-	11	-	22	3.0	2	-	1	-	3	-
25-34	18	-	6	-	24	2.6	10	-	9	-	19	-
35-39	11	-	13	-	24	4.2	8	-	3	-	11	-
40-44	14	-	9	-	23	4.5	12	-	5	-	17	-
45-49	15	-	12	-	27	6.4	12	-	9	-	21	5.0
50-54	29	17.6	12	-	41	12.5	20	12.1	7	-	27	8.2
55-59	22	18.5	14	-	36	15.1	20	16.8	12	-	32	13.4
60-64	22	23.5	12	-	34	17.5	17	-	11	-	28	14.4
65-69	27	28.3	18	-	45	22.2	26	27.3	14	-	40	19.8
70-74	14	-	24	24.0	38	21.2	11	-	23	23.0	34	18.9
75-79	13	-	12	-	25	17.5	17	-	14	-	31	21.7
80-84	11	-	9	-	20	20.4	13	-	15	-	28	28.6
85+	2	-	2	-	4	-	5	-	6	-	11	-

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Brain and other CNS:  
New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	4	1	5	3	0	3
Carroll	0	2	2	0	2	2
Cheshire	2	1	3	4	0	4
Coos	1	1	2	1	3	4
Grafton	2	2	4	3	2	5
Hillsborough	13	10	23	9	9	18
Merrimack	5	6	11	4	4	8
Rockingham	14	8	22	4	5	9
Strafford	4	0	4	2	2	4
Sullivan	1	1	2	3	2	5
<b>State Total</b>	<b>46</b>	<b>32</b>	<b>78</b>	<b>33</b>	<b>29</b>	<b>62</b>

# BREAST (FEMALE)

Breast cancer is the most common type of cancer among women in New Hampshire and the second leading cause of cancer death after lung cancer in women. Early detection of breast cancer is the most effective approach to reduce mortality from this disease.

## Facts

- Age Most Often Affected: 40+
- Survival Information: The 5-year relative survival rate for localized breast cancer has increased from 72% in the 1940s to 96% today. If the cancer has spread regionally however, the survival rate is 77%, and for women with distant metastases, the rate is 21%. Seventy-one percent of women diagnosed with breast cancer survive 10 years, and 57% survive 15 years.



18% (95% CI:14.4-22.1) of NH women age 50+ had not had a clinical breast exam and mammogram in the past 2 years.

## Known Risk Factors

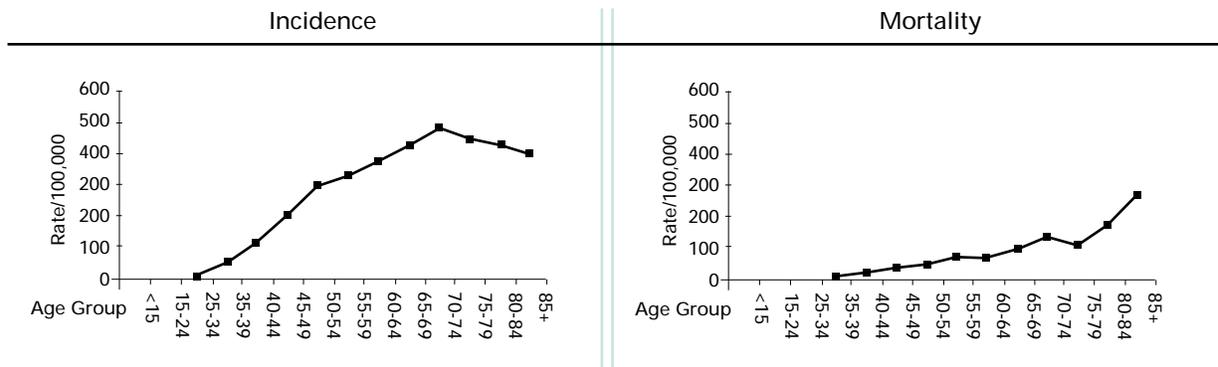
- Family history of breast cancer
- Early menarche and/or late menopause
- Never pregnant or having first live birth at a late age

## Screening and Early Detection

- Monthly self-examinations
- Regular clinical breast exams
- Mammograms as appropriate
- For women with a family history of breast cancer, some physicians and researchers recommend screening for changes in BRCA1 or BRCA2 genes.  
(\* See BCCP screening guidelines on page 27).

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	848	137.7	139.6	185	29.5	28.0

Breast (Female): Incidence and Mortality Rates by Age, 1995-1999



Breast (Female): Age-specific Incidence and Mortality Rates, 1995–1999

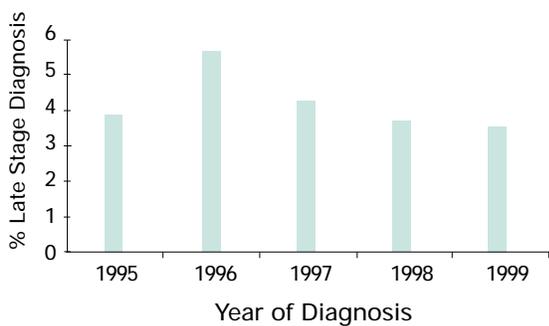
Age Group	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
<15	0	-	0	-
15-24	0	-	0	-
25-34	63	13.5	6	-
35-39	154	53.8	21	7.3
40-44	296	116.5	34	13.4
45-49	434	207.9	67	32.1
50-54	498	303.1	74	45.0
55-59	405	337.7	75	62.5
60-64	382	380.7	63	62.8
65-69	464	432.9	95	88.6
70-74	487	486.7	129	128.9
75-79	379	453.1	88	105.2
80-84	273	443.8	103	167.5
85+	256	416.0	163	264.9

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Breast (Female): New Cases and Deaths by County, 1999

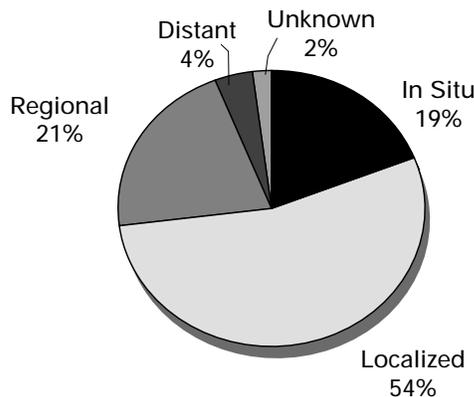
County	New Cases	Deaths
Belknap	71	13
Carroll	36	11
Cheshire	40	6
Coos	21	6
Grafton	67	17
Hillsborough	236	38
Merrimack	91	29
Rockingham	188	41
Strafford	67	15
Sullivan	31	9
<b>State Total</b>	<b>848</b>	<b>185</b>

Breast (Female): Late Stage Diagnosis Trends, 1995–1999



\* See appendix for definition of late stage diagnosis.

Breast (Female): Stage at Diagnosis, 1999

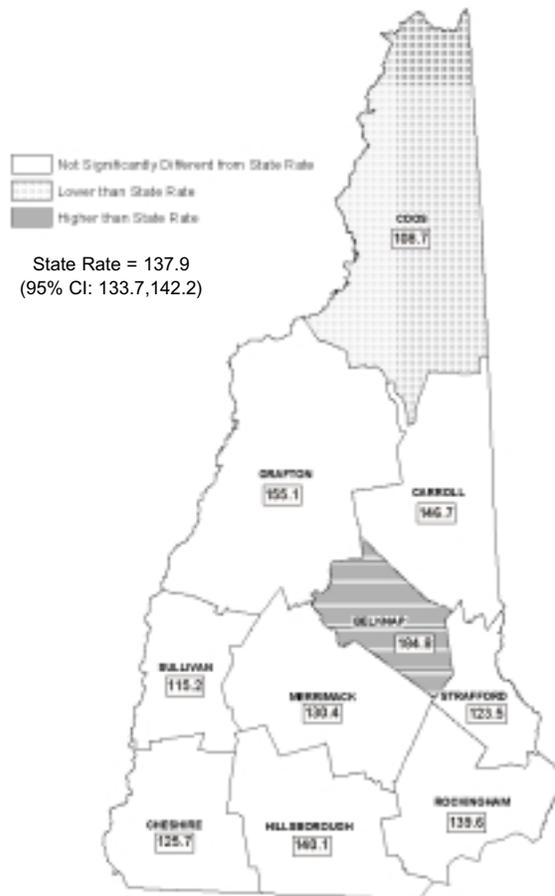


Breast (Female): Age-adjusted Incidence and Mortality Rates by County, 1995–1999

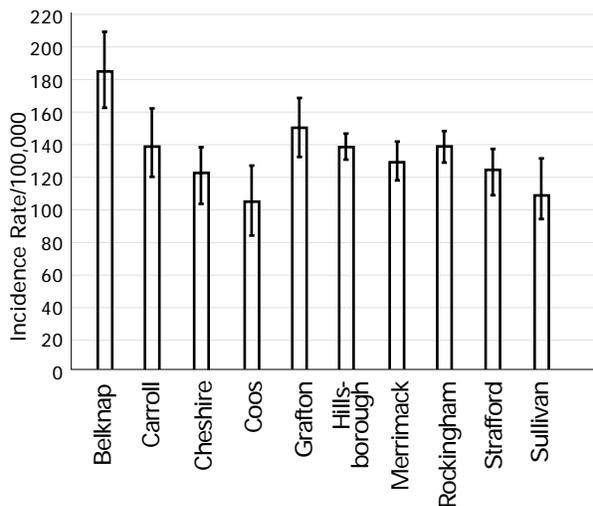
County	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
Belknap	275	<b>184.8</b>	52	31.3
Carroll	179	146.7	31	23.3
Cheshire	243	125.7	50	23.2
Coos	114	<b>108.7</b>	31	25.8
Grafton	310	155.1	66	30.8
Hillsborough	1,221	140.1	256	28.5
Merrimack	424	130.4	111	32.2
Rockingham	868	139.6	194	31.2
Strafford	324	123.5	81	29.1
Sullivan	133	115.2	46	38.1
State Total			918	

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates in **bold** type are significantly different from the state rate at the 95% confidence interval.

Breast (Female): Age-adjusted Incidence Rates by County, 1995–1999

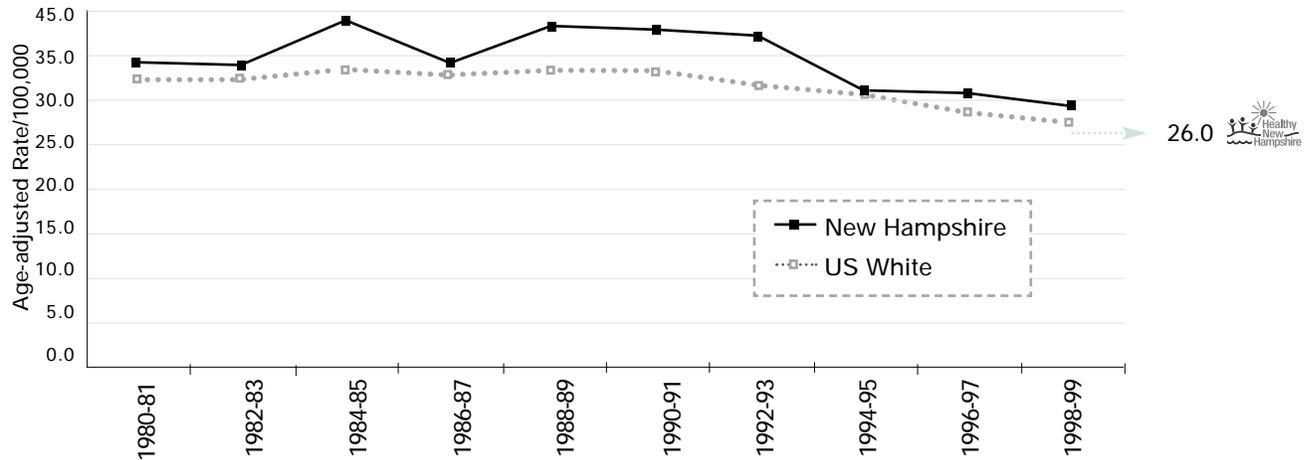


Breast (Female): Age-adjusted Incidence Rates by County with 95% Confidence Intervals, 1995–1999



Note: Rates are age-adjusted to the 2000 US standard population. **I** represents 95% confidence interval. The confidence interval bars can be used to compare the rates in different counties. If the bars overlap at any point, the rates are not statistically different. The above chart shows that there are statistically meaningful differences between Coos (lower than some) and Belknap (higher than some) and some of the other counties.

## Breast (Female): Age-adjusted Mortality Rate Trend, 1980–1999



Note: Rates are two year averages and are age-adjusted to the 2000 US standard population. The mortality rates are significantly different at the 95% confidence interval between the start and end of the period.



### Screening Guidelines for Women of Different Ages

Age	Recommendation	Benefit
< 40	Breast exam by doctor	No data
40 – 49	Breast exam by doctor Mammogram every 1 to 2 years	May reduce chances of dying from breast cancer by 17%.
50 – 74	Breast exam by doctor Mammogram every 1 to 2 years	May reduce chances of dying from breast cancer by 30%.
> 75	Breast exam by doctor Mammogram every 1 to 2 years	No data

- For more information about breast and cervical cancer screening services in New Hampshire, contact:  
The NH DHHS's "Let No Woman Be Overlooked" program at 1-800-852-3345 ext. 4931 (in NH) or 603-271-4931.

# CERVIX UTERI

Cells on the surface of the cervix sometimes appear abnormal but are not cancerous. These abnormal changes in cells on the cervix can be the first step in a series of slow changes that can lead to cervical cancer years later. Most precancerous conditions of the cervix can be detected through regularly scheduled Pap tests. If detected, these precancerous conditions can be treated before cancer develops. Also, any invasive cancer that does occur would likely be found at an early, curable stage.

## Facts

- Age Most Often Affected: 20+
- Survival Information: Eighty-nine percent of invasive cervical cancer patients survive one year after diagnosis, and 70% survive five years. When detected at an early stage, invasive cervical cancer is one of the most successfully treatable cancers with a 5-year relative survival rate of 91% for localized cancers.

## Known Risk Factors

- Genital human papillomavirus (HPV) infection (especially types 16, 18, 31, 45)
- Sexual intercourse before age 18
- Multiple sexual partners
- Smoking

## Screening and Early Detection

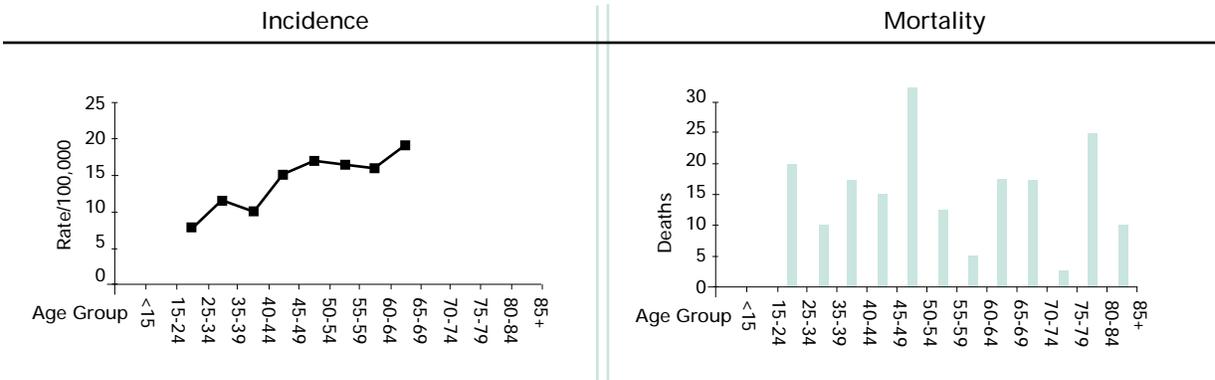
- Recommended Pap tests.  
(\* See BCCP screening guidelines on page 29).



10% (95% CI: 7.7-12.1) of adult NH women have not had a Pap test in the last 3 years.

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	41	8.2	9.0	13	2.4	2.8

Cervix Uteri: Incidence Rates and Mortality by Age, 1995-1999



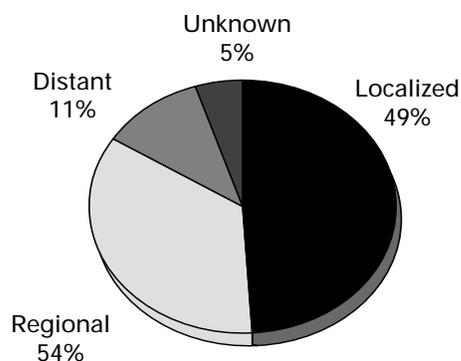
Note: Actual number of events are plotted in place of rates for mortality, there were not enough reliable rates available to produce a meaningful chart.

### Cervix Uteri: Age-specific Incidence and Mortality Rates, 1995-1999

Age Group	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
<15	0	-	0	-
15-24	3	-	0	-
25-34	36	7.7	8	-
35-39	33	11.5	4	-
40-44	26	10.2	7	-
45-49	32	15.3	6	-
50-54	28	17.0	13	-
55-59	20	16.7	5	-
60-64	16	-	2	-
65-69	21	19.6	7	-
70-74	6	-	7	-
75-79	5	-	1	-
80-84	17	-	10	-
85+	6	-	4	-

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

### Cervix Uteri: Stage at Diagnosis, 1999



### Cervix Uteri: New Cases and Deaths by County, 1999

County	New Cases	Deaths
Belknap	2	1
Carrroll	1	1
Cheshire	2	0
Coos	1	0
Grafton	3	2
Hillsborough	12	1
Merrimack	5	1
Rockingham	9	2
Strafford	3	2
Sullivan	3	3
<b>State Total</b>	<b>41</b>	<b>13</b>

### Screening Guidelines

- Begin with the onset of sexual activity or age 18.
- Continue less frequently at the discretion of the doctor and patient after three or more annual tests have been normal.
- For more information about breast and cervical cancer screening services in New Hampshire, contact:  
The NH DHHS's "Let No Woman Be Overlooked" program at 1-800-852-3345 ext. 4931 (in NH) or 603-271-4931.



# COLON AND RECTUM

Colorectal cancer is the fourth leading cause of cancer and the second leading cause of cancer death in New Hampshire. Over 95% of colorectal cancers are adenocarcinomas which are cancers that line the inside of the colon and rectum. Early detection of colorectal cancer and improved therapy are proven means to reduce mortality from this disease.

## Facts

- Age Most Often Affected: 65+
- Survival Information: When colorectal cancers are detected in an early, localized stage, the 5-year relative survival rate is 90%, however only 37% of colorectal cancers are discovered at this stage. If the cancer has spread regionally, the rate drops to 65%. The 5-year survival rate for persons with distant metastases is 8%.

## Known Risk Factors

- Family history of colorectal cancer
- Intestinal adenomatous polyps
- Inflammatory bowel disease
- Obesity and physical inactivity

## Screening and Early Detection

- Colonoscopy/flexible sigmoidoscopy
- Fecal occult blood test
- Double-contrast barium enema

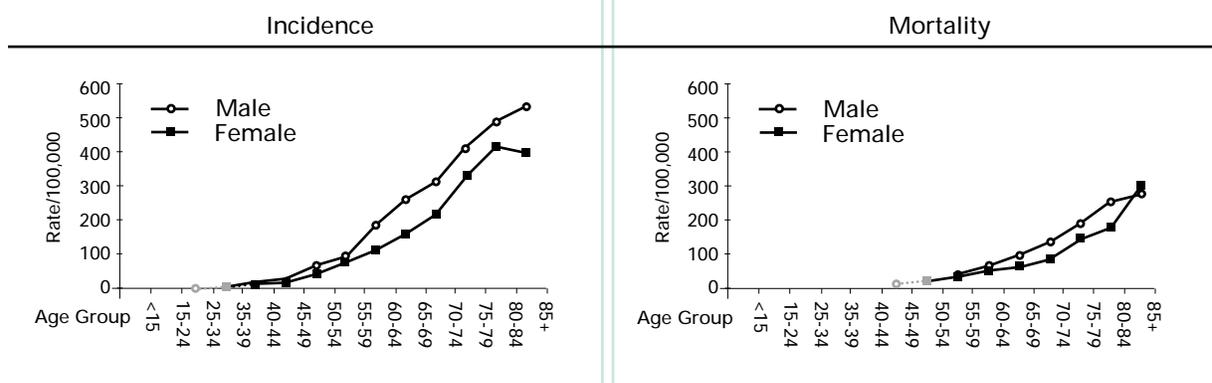


53% (95% CI:48.0-58.3) of NH adults age 50+ have never had a sigmoidoscopic or proctoscopic exam (1999).

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	285	<b>68.7</b>	64.3	137	<b>28.3</b>	25.7
Female	306	<b>49.0</b>	46.0	132	<b>21.8</b>	17.9
<b>Total</b>	<b>591</b>	<b>57.6</b>	53.8	<b>269</b>	<b>24.7</b>	21.2

Note: New Hampshire rates in bold type are significantly different from national rates at the 95% confidence interval

Colorectal: Incidence and Mortality Rates by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

### Colorectal: Age-specific Incidence and Mortality Rates by Sex, 1995–1999

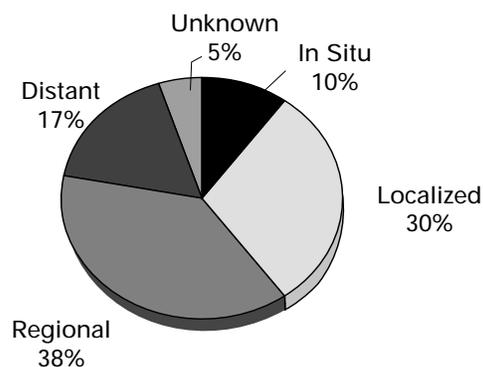
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	0	-	0	-	0	-	0	-	0	-	0	-
15-24	3	-	1	-	4	-	2	-	0	-	2	-
25-34	14	-	9	-	23	2.5	5	-	3	-	8	-
35-39	10	-	14	-	24	4.2	4	-	5	-	9	-
40-44	34	13.2	30	11.8	64	12.5	10	-	3	-	13	-
45-49	58	27.1	35	16.8	93	22.0	23	10.7	16	-	39	9.2
50-54	114	69.2	71	43.2	185	56.2	36	21.9	27	16.4	63	19.1
55-59	113	95.2	92	76.7	205	85.9	38	32.0	35	29.2	73	30.6
60-64	180	192.2	112	111.6	292	150.5	58	61.9	49	48.8	107	55.2
65-69	252	264.5	175	163.3	427	210.9	89	93.4	66	61.6	155	76.6
70-74	258	324.9	217	216.9	475	264.7	106	133.5	84	84.0	190	105.9
75-79	253	426.7	281	335.9	534	373.6	112	188.9	122	145.9	234	163.7
80-84	184	506.5	259	421.1	443	452.8	93	256.0	108	175.6	201	205.4
85+	126	548.8	250	406.3	376	445.0	66	287.4	188	305.5	254	300.6

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

### Colorectal: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	9	16	25	8	3	11
Carroll	12	17	29	8	10	18
Cheshire	16	18	34	7	6	13
Coos	7	16	23	5	6	11
Grafton	26	23	49	12	12	24
Hillsborough	77	86	163	34	35	69
Merrimack	36	33	69	16	24	40
Rockingham	49	51	100	25	22	47
Strafford	36	32	68	14	10	24
Sullivan	16	14	30	8	4	12
<b>State Total</b>	<b>285</b>	<b>306</b>	<b>591</b>	<b>137</b>	<b>132</b>	<b>269</b>

### Colorectal: Stage at Diagnosis, 1999

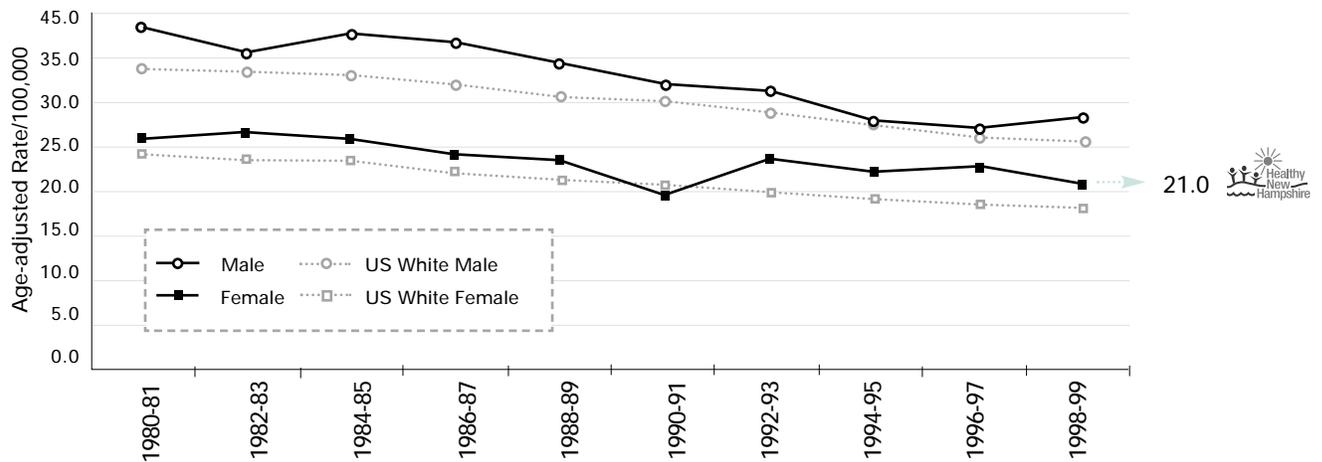


### Colorectal: Age-adjusted Incidence and Mortality Rates by Sex and County, 1995–1999

County	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Belknap	83	63.0	64	38.2	147	48.8	35	29.4	28	16.3	63	21.1
Carroll	81	72.6	87	61.0	168	67.8	32	28.4	45	32.2	77	31.1
Cheshire	90	56.5	101	46.6	191	51.1	45	28.9	33	16.1	78	21.0
Coos	62	68.4	72	55.5	134	62.2	30	32.5	28	19.8	58	26.9
Grafton	121	70.3	108	48.9	229	58.9	55	31.7	55	24.0	110	28.2
Hillsborough	455	72.2	432	48.7	887	58.2	182	30.4	192	20.9	374	24.6
Merrimack	172	68.2	186	49.4	358	58.0	70	27.8	94	24.5	164	26.4
Rockingham	331	69.0	298	49.1	629	58.1	111	<b>23.9</b>	131	21.3	242	22.7
Strafford	142	76.3	135	48.7	277	58.3	53	31.4	62	21.7	115	24.5
Sullivan	61	62.6	63	48.2	124	55.5	29	29.2	38	27.3	67	29.2
<b>State Total</b>	<b>1,598</b>	<b>68.7</b>	<b>1,546</b>	<b>49.1</b>	<b>3,144</b>	<b>57.6</b>	<b>642</b>	<b>28.3</b>	<b>706</b>	<b>21.8</b>	<b>1,348</b>	<b>24.7</b>

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates in **bold** type are significantly different from the state rate at the 95% confidence interval.

### Colorectal: Age-adjusted Mortality Rate Trends by Sex, 1980–1999



Note: Rates are two year averages and are age-adjusted to the 2000 US standard population. The mortality rates are significantly different at the 95% confidence interval between the start and end of the period.



# CORPUS UTERI

Cancer of the uterus is the most common cancer of the female reproductive tract. It is also called endometrial cancer because the site of cancer is usually the endometrium or lining of the uterus. Nationally, incidence rates are higher among white women than black women, but the relationship is reversed for mortality—the mortality rate for black women is nearly twice as high as for white women.

## Facts

- Age Most Often Affected: 50+
- Survival Information: The 1-year relative survival rate for endometrial cancer is 93%. The 5-year relative survival rate is 95% if the cancer is discovered at an early stage and 64% if diagnosed at a regional stage.

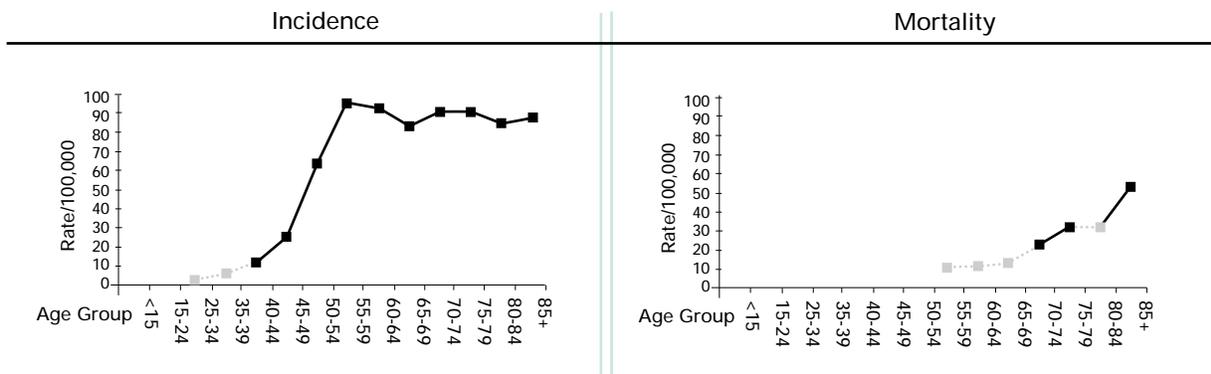
## Known Risk Factors

- Exposure to estrogen, including estrogen replacement therapy; early menarche, and late menopause
- Diabetes and hypertension
- Gallbladder disease
- Obesity
- Colorectal or breast cancer

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997 SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	158	<b>26.9</b>	26.6	25	<b>4.7</b>	2.0

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval.

## Corpus Uteri: Incidence and Mortality Rates by Age, 1995-1999



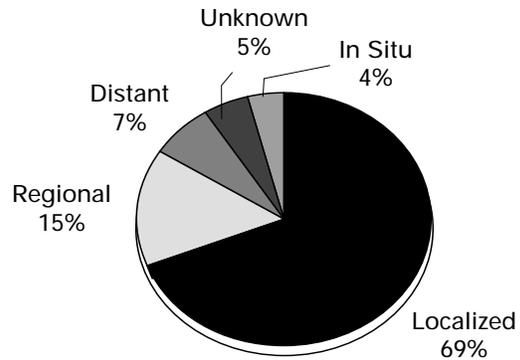
Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

Corpus Uteri: Age-specific Incidence and Mortality Rates, 1995–1999

Age Group	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
<15	0	-	0	-
15-24	0	-	0	-
25-34	13	-	1	-
35-39	17	-	0	-
40-44	29	11.4	3	-
45-49	53	25.4	4	-
50-54	105	63.9	5	-
55-59	114	95.0	12	-
60-64	93	92.7	12	-
65-69	89	83.0	13	-
70-74	91	90.9	22	22.0
75-79	76	90.9	26	31.1
80-84	53	86.2	19	-
85+	54	87.8	32	52.0

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Corpus Uteri: Stage at Diagnosis, 1999



Corpus Uteri: New Cases and Deaths by County, 1999

County	New Cases	Deaths
Belknap	7	1
Carroll	7	1
Cheshire	10	2
Coos	4	2
Grafton	10	1
Hillsborough	42	7
Merrimack	11	2
Rockingham	41	9
Strafford	16	0
Sullivan	9	0
<b>State Total</b>	<b>158</b>	<b>25</b>

# ESOPHAGUS

Esophageal cancer in New Hampshire and the U.S. is relatively rare; however, it is the fifth leading cause of cancer death worldwide. Esophageal cancer is almost three times more common among men than among women and three times more common among African Americans than among whites.

## Facts

- Age Most Often Affected: 60+
- Gender Most Often Affected: Male
- Survival Information: Survivability for esophageal cancer depends greatly on stage at diagnosis; earlier detection leads to much higher survival rates. Five-year survival rates for cancers detected at early stage are 75%, 50% for localized ones, 20% for regional, and less than 1% for distant.

## Known Risk Factors

- Use of tobacco products
- Chronic or heavy alcohol use
- Persistent acid reflux (heartburn)

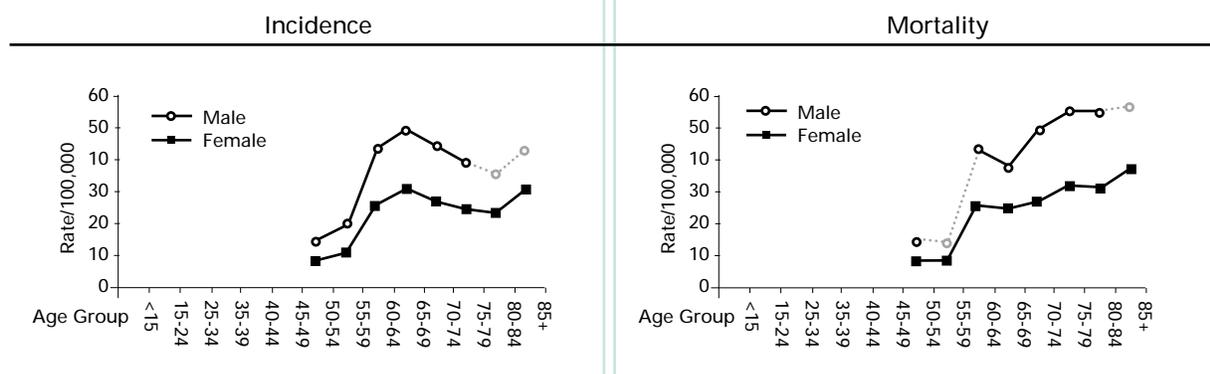


25% (95% CI: 23.0-27.7) of NH adults are current smokers.  
5% (95% CI: 3.2-6.6) of NH adults are chronic drinkers of alcohol (60+ drinks/month) (1999).

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	16	<b>2.7</b>	1.9	20	<b>2.5</b>	1.6
Total	64	<b>5.9</b>	4.3	75	<b>5.8</b>	4.0

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval.

## Esophagus: Incidence and Mortality Rates by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

Esophagus: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

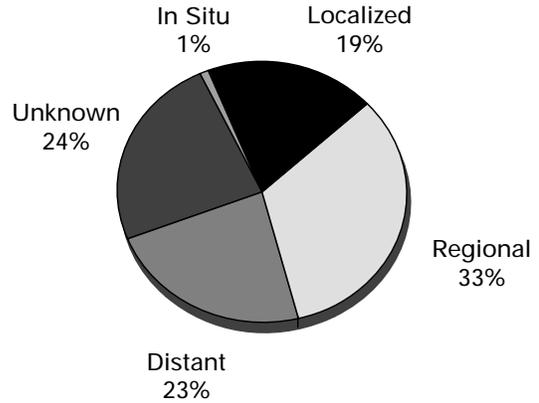
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	0	-	0	-	0	-	0	-	0	-	0	-
15-24	0	-	0	-	0	-	0	-	0	-	0	-
25-34	1	-	0	-	1	-	2	-	0	-	2	-
35-39	1	-	1	-	2	-	0	-	0	-	0	-
40-44	8	-	2	-	10	-	5	-	2	-	7	-
45-49	7	-	1	-	8	-	5	-	1	-	6	-
50-54	24	14.6	3	-	27	8.2	26	15.8	2	-	28	8.5
55-59	24	20.2	2	-	26	10.9	17	-	3	-	20	8.4
60-64	41	43.8	9	-	50	25.8	40	42.7	9	-	49	25.3
65-69	47	49.3	16	-	63	31.1	36	37.8	13	-	49	24.2
70-74	34	42.8	14	-	48	26.7	39	49.1	10	-	49	27.3
75-79	23	38.8	12	-	35	24.5	33	55.7	12	-	45	31.5
80-84	13	-	10	-	23	23.5	20	55.1	10	-	30	30.7
85+	10	-	16	-	26	30.8	13	-	18	-	31	36.7

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Esophagus: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	6	2	8	7	1	8
Carroll	4	1	5	1	1	2
Cheshire	7	0	7	6	2	8
Coos	0	0	0	0	0	0
Grafton	2	1	3	0	1	1
Hillsborough	14	4	18	19	4	23
Merrimack	5	1	6	6	2	8
Rockingham	7	3	10	8	4	12
Strafford	2	3	5	5	3	8
Sullivan	1	1	2	3	2	5
State Total	49	16	65	55	20	75

Esophagus: Stage at Diagnosis, 1999



# HODGKIN'S DISEASE

Hodgkin's Disease is a type of cancer of the lymphatic system. Hodgkin's disease is an uncommon lymphoma, and accounts for less than 1 percent of all cases of cancer in New Hampshire.

**Facts**

- Age Most Often Affected: Young adulthood (15-34) and 60+
- Gender Most Often Affected: Male
- Survival Information: The 1-year relative survival rate for Hodgkin's Disease is 93%, 82% for 5-year, and 72% for 10-year.

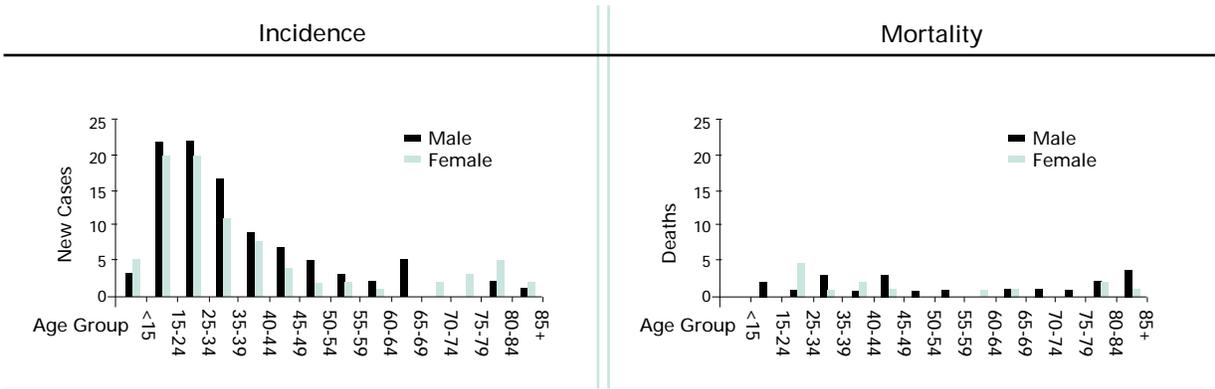
**Known Risk Factors**

- Family history of Hodgkin's Disease.
- Exposure to Epstein-Barr virus

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	19	2.8	2.7	0	-	0.5
Total	41	3.1	2.9	6	0.6	0.6

Note: Rates are not displayed if fewer than 20 events were reported (noted as -).

Hodgkin's Disease: Incidence and Mortality by Age and Sex, 1995-1999



Note: Actual number of events are plotted in place of rates, there were not enough reliable rates available to produce a meaningful chart.

### Hodgkin's Disease: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	2	-	5	-	7	-	0	-	0	-	0	-
15-24	22	6.0	20	5.5	42	5.8	2	-	0	-	2	-
25-34	22	4.8	20	4.3	42	4.6	1	-	5	-	6	-
35-39	21	7.3	11	-	32	5.6	3	-	1	-	4	-
40-44	9	-	8	-	17	-	1	-	2	-	3	-
45-49	7	-	4	-	11	-	3	-	1	-	4	-
50-54	5	-	2	-	7	-	1	-	0	-	1	-
55-59	4	-	2	-	6	-	1	-	0	-	1	-
60-64	2	-	1	-	3	-	0	-	1	-	1	-
65-69	5	-	0	-	5	-	1	-	1	-	2	-
70-74	0	-	2	-	2	-	1	-	0	-	1	-
75-79	0	-	3	-	3	-	1	-	0	-	1	-
80-84	2	-	5	-	7	-	2	-	2	-	4	-
85+	1	-	2	-	3	-	4	-	1	-	5	-

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

### Hodgkin's Disease: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	0	0	0	1	0	1
Carroll	0	0	0	0	0	0
Cheshire	1	1	2	0	0	0
Coos	0	1	1	1	0	1
Grafton	0	2	2	1	0	1
Hillsborough	9	8	17	1	0	1
Merrimack	2	3	5	0	0	0
Rockingham	7	4	11	2	0	2
Strafford	3	0	3	0	0	0
Sullivan	0	0	0	0	0	0
State Total	22	19	41	6	0	6

# KIDNEY AND RENAL PELVIS

Several types of cancer can develop in the kidney; the most common form of kidney cancer in adults is renal cell cancer. Cancers of the kidney account for one third of all urinary tract neoplasms. The incidence of this cancer has continued to rise over the past decade, and it is twice as common in males as females.

## Facts

- Age Most Often Affected: 50+
- Gender Most Often Affected: Male
- Survival Information: Survival is greatly dependent on the stage at which the cancer is diagnosed. For those cancers discovered at the local stage, the 5-year survival rate is 88%, for regional it is 61%. However for those diagnosed at a distant stage the 5-year survival rate is less than 10%.

## Known Risk Factors

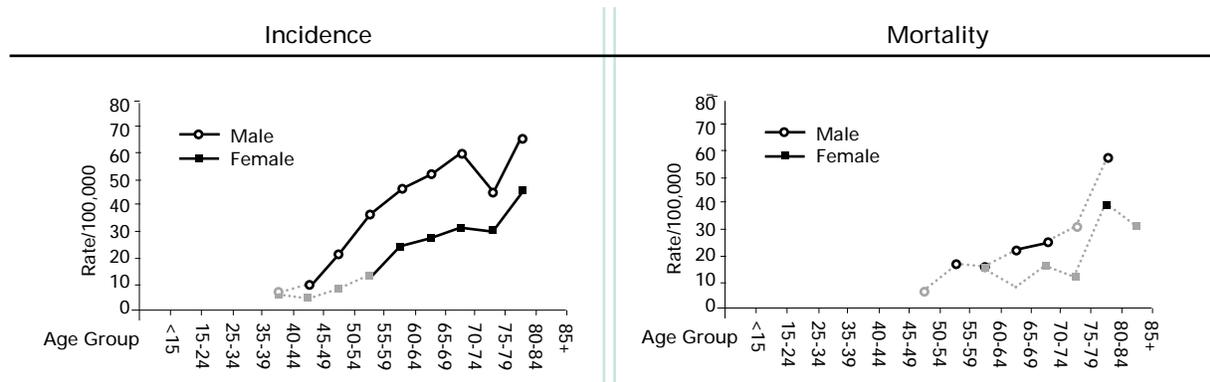
- Smoking
- Obesity
- Occupational exposures to coal fumes



25% (95% CI: 23.0-27.7) of NH adults are current smokers.

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997 SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	42	7.0	7.5	20	3.6	3.1
Total	111	10.0	10.7	43	4.7	4.6

Kidney and Renal Pelvis: Incidence and Mortality Rates by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

Kidney and Renal Pelvis: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

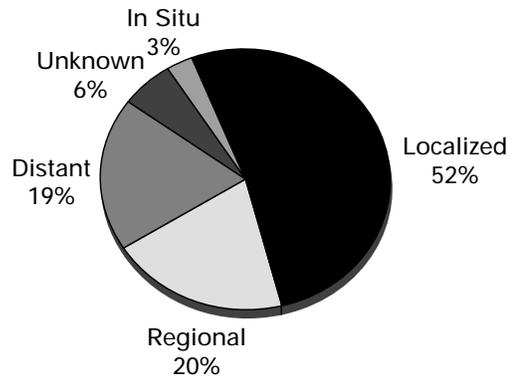
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	5	-	1	-	6	-	0	-	0	-	0	-
15-24	0	-	0	-	0	-	0	-	0	-	0	-
25-34	6	-	5	-	11	-	0	-	1	-	1	-
35-39	7	-	7	-	14	-	2	-	1	-	3	-
40-44	19	-	13	-	32	6.3	3	-	3	-	6	-
45-49	21	9.8	10	-	31	7.3	5	-	5	-	10	-
50-54	36	21.9	13	-	49	14.9	11	-	5	-	16	-
55-59	44	37.1	15	-	59	24.7	21	17.7	4	-	25	10.5
60-64	43	45.9	24	23.9	67	34.5	15	-	15	-	30	15.5
65-69	50	52.5	28	26.1	78	38.5	21	22.0	9	-	30	14.8
70-74	48	60.4	32	32.0	80	44.6	20	25.2	16	-	36	20.1
75-79	29	48.9	25	29.9	54	37.8	19	-	10	-	29	20.3
80-84	24	66.1	28	45.5	52	53.2	21	57.8	24	39.0	45	46.0
85+	7	-	10	-	17	-	8	-	19	-	27	32.0

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Kidney and Renal Pelvis: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	1	0	1	1	0	1
Carroll	4	1	5	0	1	1
Cheshire	0	4	4	1	0	1
Coos	5	2	7	1	1	2
Grafton	6	0	6	2	0	2
Hillsborough	27	15	42	7	9	16
Merrimack	2	5	7	3	3	6
Rockingham	17	13	30	5	5	10
Strafford	5	2	7	2	1	3
Sullivan	2	0	2	1	0	1
<b>State Total</b>	<b>69</b>	<b>42</b>	<b>110</b>	<b>23</b>	<b>20</b>	<b>43</b>

Kidney and Renal Pelvis: Stage at Diagnosis, 1999



# LARYNX

Cancer of the larynx or voice box is a relatively rare disease. The risk factors for laryngeal cancer are similar to those for other cancers of the mouth and throat.

## Facts

- Age Most Often Affected: 60+
- Gender Most Often Affected: Male
- Survival Information: 88% of laryngeal cancer patients survive one year after diagnosis. The majority of cases are diagnosed while still localized having an 81% 5-year survival rate. For all stages combined, the 5-year relative survival rate is 65% and the 10-year rate is 53%.

## Known Risk Factors

- Use of tobacco products
- Chronic or heavy alcohol use
- Exposure to asbestos, nickel, mustard gas, wood dust

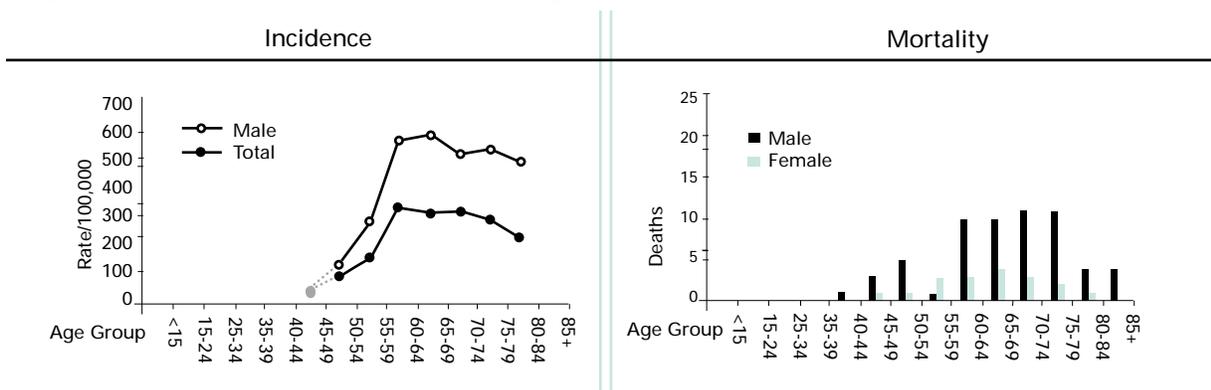


25% (95% CI: 23.0-27.7) of NH adults are current smokers.  
 5% (95% CI: 3.2-6.6) of NH adults are chronic drinkers of alcohol (60+ drinks/month) (1999).

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997 SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	13	<b>2.1</b>	1.5	6	-	0.5
Total	56	<b>5.6</b>	3.9	16	1.4	1.3

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval. Rates are not displayed if fewer than 20 events were reported (noted as -).

## Larynx: Incidence Rates and Mortality by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution. Actual number of events are plotted in place of rates for mortality, there were not enough reliable rates available to produce a meaningful chart.

Larynx: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

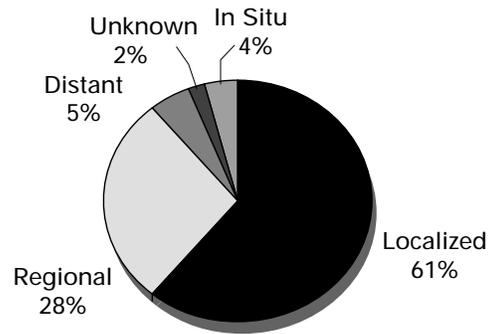
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	0	-	0	-	0	-	0	-	0	-	0	-
15-24	0	-	0	-	0	-	0	-	0	-	0	-
25-34	1	-	1	-	2	-	0	-	0	-	0	-
35-39	2	-	1	-	3	-	0	-	0	-	0	-
40-44	4	-	3	-	7	-	1	-	0	-	1	-
45-49	11	-	3	-	14	-	3	-	1	-	4	-
50-54	19	-	8	-	27	8.2	5	-	1	-	6	-
55-59	29	24.4	4	-	33	13.8	1	-	3	-	4	-
60-64	44	47.0	10	-	54	27.8	10	-	3	-	13	-
65-69	47	49.3	7	-	54	26.7	10	-	4	-	14	-
70-74	35	44.1	13	-	48	26.7	11	-	3	-	14	-
75-79	27	45.5	8	-	35	24.5	11	-	2	-	13	-
80-84	15	-	4	-	19	-	4	-	1	-	5	-
85+	9	-	1	-	10	-	4	-	0	-	4	-

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Larynx: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	4	3	7	3	0	3
Carroll	3	1	4	0	0	0
Cheshire	1	0	1	1	0	1
Coos	1	0	1	0	1	1
Grafton	4	0	4	0	0	0
Hillsborough	9	4	13	2	1	3
Merrimack	3	0	3	1	0	1
Rockingham	12	3	15	3	2	5
Strafford	4	1	5	0	0	0
Sullivan	2	1	3	0	2	2
State Total	43	13	56	10	6	16

Larynx: Stage at Diagnosis, 1999



# LEUKEMIAS

Leukemia is a cancer in which the body produces large numbers of abnormal blood cells. In most types of leukemia, the white blood cells are affected. Leukemia cells usually appear different from normal blood cells and do not function properly, impairing the body's ability to fight infection. Although it is often thought of as a childhood disease, leukemia affects many more adults than children each year.

## Facts

- Age Most Often Affected: All ages
- Gender Most Often Affected: Both genders
- Survival Information: The 1-year relative survival rate for patients with leukemia is 64%. Survival drops to 43% five years after diagnosis, primarily due to the poor survival rates of particular types of leukemia, such as acute myelocytic Leukemia. There has been a dramatic improvement in survival for patients with acute lymphocytic leukemia—from a 5-year relative survival rate of 38% in the mid-1970s to 59% in the early 1990s. Survival rates for children have increased from 53% to 81% over the same period.

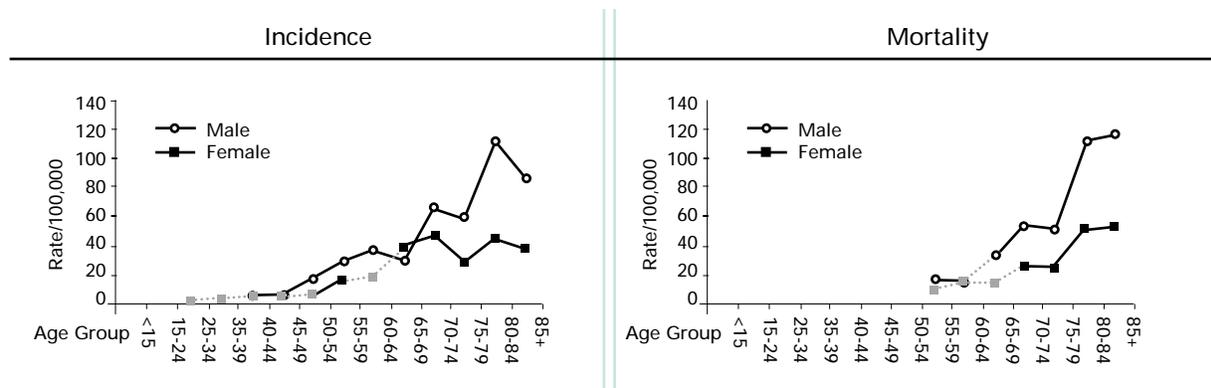
## Known Risk Factors

- Exposure to radiation
- Some genetic conditions, such as Down's syndrome
- Long term exposure to benzene

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	63	9.2	9.7	37	5.7	6.1
Total	136	<b>11.5</b>	12.5	91	7.8	7.9

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval.

Leukemias: Incidence and Mortality Rates by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

Leukemias: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	23	3.6	19	-	42	3.4	7	-	4	-	11	-
15-24	5	-	6	-	11	-	2	-	3	-	5	-
25-34	8	-	10	-	18	-	8	-	4	-	12	-
35-39	5	-	9	-	14	-	1	-	3	-	4	-
40-44	14	-	16	-	30	5.9	3	-	6	-	9	-
45-49	14	-	11	-	25	5.9	10	-	6	-	16	-
50-54	31	18.8	10	-	41	12.5	7	-	2	-	9	-
55-59	36	30.3	20	16.7	56	23.5	21	17.7	11	-	32	13.4
60-64	35	37.4	18	-	53	27.3	15	-	16	-	31	16.0
65-69	30	31.5	41	38.3	71	35.1	33	34.6	15	-	48	23.7
70-74	55	69.3	47	47.0	102	56.8	43	54.1	25	25.0	68	37.9
75-79	37	62.4	25	29.9	62	43.4	31	52.3	21	25.1	52	36.4
80-84	40	110.1	27	43.9	67	68.5	41	112.9	32	52.0	73	74.6
85+	20	87.1	23	37.4	43	50.9	27	117.6	33	53.6	60	71.0

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Leukemias: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	5	6	11	3	6	9
Carroll	3	2	5	1	0	1
Cheshire	8	5	13	4	2	6
Coos	4	3	7	3	0	3
Grafton	4	9	13	2	2	4
Hillsborough	15	17	32	14	7	21
Merrimack	9	6	15	4	6	10
Rockingham	13	9	22	13	8	21
Strafford	5	3	8	5	3	8
Sullivan	7	3	10	5	3	8
State Total	73	63	136	54	37	91

# LIVER

Liver cancer is the fifth most common cancer worldwide. Rates in developing countries are much higher than in the United States.

## Facts

- Age Most Often Affected: 50+
- Gender Most Often Affected: Male
- Survival Information: Because symptoms of liver cancer often do not appear until the disease is advanced, only a small number of liver cancers are found in the early stages and can be removed through surgery. Less than 30% of the patients having explorative surgery are able to have their cancer completely removed by surgery. The overall 5-year relative survival rate from liver cancer is about 10%.

## Known Risk Factors

- Hepatitis B or C infection
- Cirrhosis of the liver
- Exposure to aflatoxin, vinyl chloride, thorium dioxide, anabolic steroids, or arsenic
- Chronic alcohol consumption

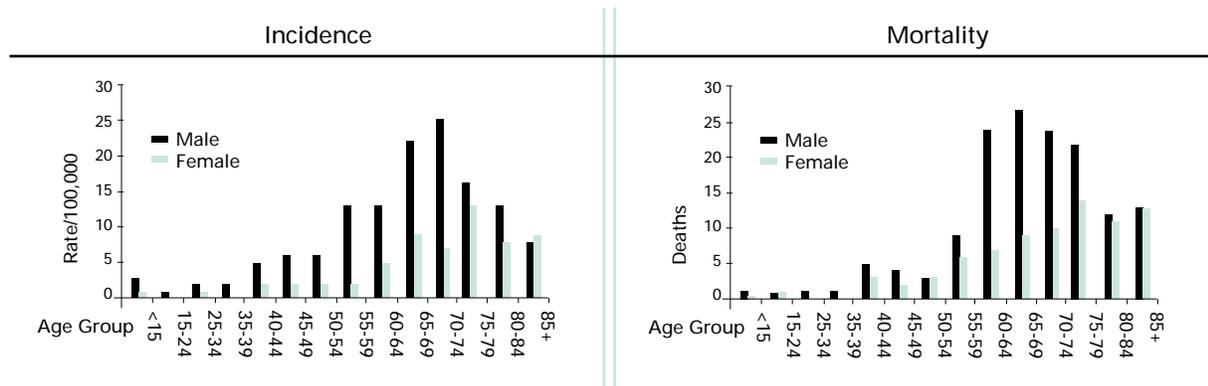


8% (95% CI: 5.1-11.7) of NH adult males are chronic drinkers of alcohol (60+ drinks per month) (1999).

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	13	<b>1.9</b>	2.7	19	2.5	2.0
Total	45	<b>3.6</b>	4.4	51	<b>4.1</b>	3.3

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval.

Liver: Incidence and Mortality by Age and Sex, 1995-1999



Note: Actual number of events are plotted in place of rates; there were not enough reliable rates available to produce a meaningful chart.

Liver: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

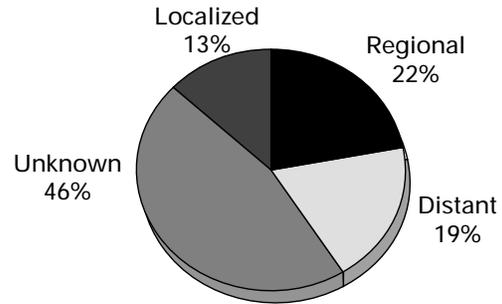
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	3	-	1	-	4	-	1	-	0	-	1	-
15-24	1	-	0	-	1	-	0	-	1	-	1	-
25-34	2	-	1	-	3	-	1	-	0	-	1	-
35-39	2	-	0	-	2	-	1	-	0	-	1	-
40-44	5	-	2	-	7	-	5	-	3	-	8	-
45-49	6	-	2	-	8	-	4	-	2	-	6	-
50-54	6	-	2	-	8	-	3	-	3	-	6	-
55-59	13	-	2	-	15	-	9	-	6	-	15	-
60-64	13	-	5	-	18	-	24	25.6	7	-	31	16.0
65-69	22	23.1	9	-	31	15.3	27	28.3	9	-	36	17.8
70-74	25	31.5	7	-	32	17.8	24	30.2	10	-	34	18.9
75-79	18	-	13	-	31	21.7	22	37.1	14	-	36	25.2
80-84	13	-	8	-	21	21.5	12	-	11	-	23	23.5
85+	8	-	9	-	17	-	13	-	13	-	26	30.8

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Liver: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	2	1	3	3	2	5
Carroll	0	1	1	0	2	2
Cheshire	4	0	4	2	1	3
Coos	2	1	3	1	1	2
Grafton	3	2	5	4	4	8
Hillsborough	5	3	8	8	6	14
Merrimack	2	0	2	4	0	4
Rockingham	9	2	11	7	2	9
Strafford	3	1	5	2	1	3
Sullivan	1	1	2	1	0	1
<b>State Total</b>	<b>32</b>	<b>13</b>	<b>45</b>	<b>32</b>	<b>19</b>	<b>51</b>

Liver: Stage at Diagnosis, 1999



# LUNG AND BRONCHUS

Lung cancer is the second most commonly diagnosed type of cancer in both men and women in New Hampshire and is the leading cause of cancer death. Cancers that begin in the lungs are divided into two major types, non-small cell lung cancer, and small cell lung cancer. Non-small cell lung cancer is more common than small cell lung cancer, and it generally grows and spreads more slowly. Small cell lung cancer grows more quickly and is more likely to spread to other organs in the body. Because symptoms often do not appear until the lung cancer of either type is advanced, early detection is difficult.

## Facts

- Age Most Often Affected: 60+
- Gender Most Often Affected: Males, although the gap with females has been narrowing over the last 20 years (following increased female smoking rates)
- Survival Information: The 1-year relative survival rates for lung cancer have increased from 34% in 1975 to 41% in 1995, largely due to improvements in surgical techniques. The 5-year relative survival rate for all stages combined remains very low, at 14%. The survival rate is 49% for cases detected when the disease is still localized, but only 15% of cases are discovered this early.

## Known Risk Factors

- Smoking
- Occupational exposure to asbestos, chloromethyl ethers, chromium, nickel, radiation, or second-hand smoking
- Exposure to radon

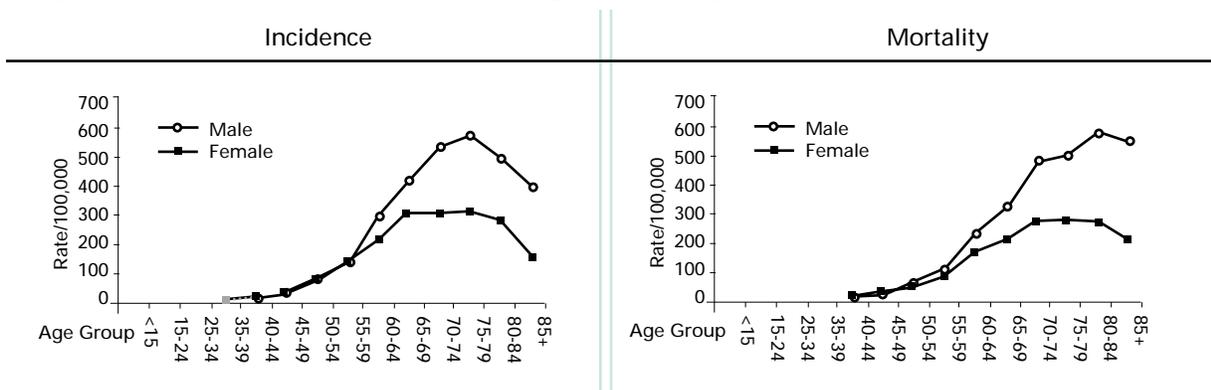


25% (95% CI: 23.0-27.7) of NH adults are current smokers.  
51% (95% CI: 46.1-55.5) of NH people have had their home tested for radon.

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	420	<b>90.3</b>	78.7	378	79.4	80.2
Female	374	<b>58.9</b>	51.7	288	<b>47.1</b>	42.1
<b>Total</b>	<b>794</b>	<b>72.0</b>	62.9	<b>666</b>	<b>60.3</b>	58.0

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval.

Lung and Bronchus: Incidence and Mortality Rates by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

Lung and Bronchus: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

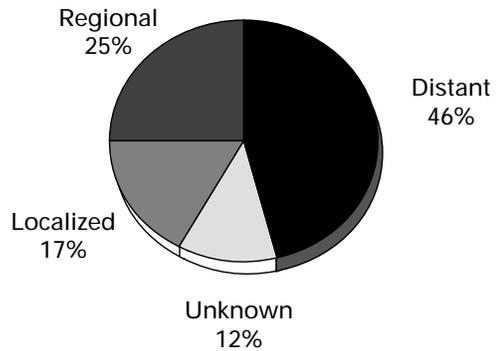
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	0	-	0	-	0	-	0	-	0	-	0	-
15-24	0	-	0	-	0	-	0	-	0	-	0	-
25-34	3	-	2	-	5	-	0	-	2	-	2	-
35-39	10	-	19	-	29	5.0	7	-	9	-	16	-
40-44	47	18.3	38	15.0	85	16.6	31	12.0	27	10.6	58	11.3
45-49	76	35.5	63	30.2	139	32.9	49	22.9	50	23.9	99	23.4
50-54	147	89.2	120	73.0	267	81.1	114	69.2	78	47.5	192	58.4
55-59	168	141.5	165	137.6	333	139.5	135	113.7	102	85.0	237	99.3
60-64	276	294.7	214	213.3	490	252.6	216	230.6	165	164.4	381	196.4
65-69	400	419.9	317	295.8	717	354.2	308	323.3	222	207.1	530	261.8
70-74	425	535.2	302	301.8	727	405.1	374	470.9	270	269.9	644	358.8
75-79	340	573.4	257	307.2	597	417.7	291	490.8	222	265.4	513	358.9
80-84	182	510.0	171	278.0	353	360.8	206	567.1	166	269.9	372	380.2
85+	92	400.7	94	152.8	186	220.1	124	540.0	123	199.9	247	292.3

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Lung and Bronchus: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	27	17	44	21	13	31
Carroll	20	13	33	20	12	32
Cheshire	32	36	68	30	21	51
Coos	23	17	40	20	8	28
Grafton	21	18	39	19	16	35
Hillsborough	109	106	215	101	77	178
Merrimack	43	32	75	27	26	53
Rockingham	88	81	169	82	69	151
Strafford	39	39	78	35	28	63
Sullivan	18	14	32	23	17	40
<b>State Total</b>	<b>420</b>	<b>374</b>	<b>794</b>	<b>378</b>	<b>288</b>	<b>666</b>

Lung and Bronchus: Stage at Diagnosis, 1999

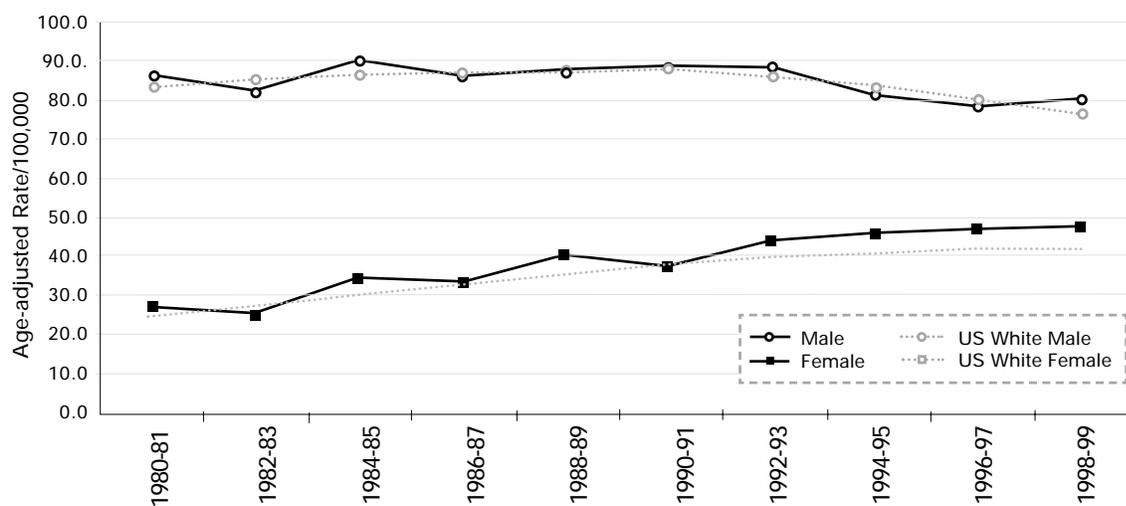


## Lung and Bronchus: Age-adjusted Incidence and Mortality Rates by Sex and County, 1995–1999

County	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Belknap	121	89.7	98	63.2	219	73.8	99	75.2	82	50.2	181	59.7
Carroll	90	76.2	71	55.8	161	64.9	84	71.7	70	54.2	154	61.9
Cheshire	157	97.1	143	<b>70.8</b>	300	<b>81.7</b>	129	81.7	92	44.5	221	59.8
Coos	94	98.3	58	49.5	152	71.2	84	87.3	46	38.3	130	60.1
Grafton	137	79.8	97	<b>46.5</b>	234	<b>60.2</b>	126	74.9	87	40.8	213	54.7
Hillsborough	599	90.9	486	56.5	1,085	70.4	506	79.6	393	44.9	899	58.8
Merrimack	223	86.2	169	52.4	392	66.6	198	78.7	132	38.7	330	55.2
Rockingham	444	91.7	375	63.8	819	75.6	368	78.7	313	53.1	681	63.4
Strafford	205	99.8	181	67.7	386	<b>80.3</b>	170	84.9	145	53.5	315	65.9
Sullivan	96	93.3	82	67.7	178	79.7	91	89.8	75	60.3	166	73.2
State Total	2,166	90.3	1,760	59.0	3,926	72.1	1,855	79.4	1,436	47.1	3,291	60.3

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates in **bold** type are significantly different from the state rate at the 95% confidence interval.

## Lung and Bronchus: Age-adjusted Mortality Rate Trends by Sex, 1980–1999



Note: Rates are two year averages and are age-adjusted to the 2000 US standard population. The female mortality rates are significantly different at the 95% confidence interval between the start and end of the period.

# MELANOMAS OF THE SKIN

Melanoma occurs when pigment cells (melanocytes) of the skin become malignant. Melanoma can occur on any skin surface. In men, melanoma is often found on the trunk (the area from the shoulders to the hips) or the head and neck. In women, melanoma often develops on the lower legs. In the United States, the number of new cases of melanoma has more than doubled in the past 20 years.

## Facts

- Age Most Often Affected: All ages, most commonly 50+
- Gender Most Often Affected: More men than women
- Survival Information: The 5-year relative survival rate for patients with malignant melanoma is 88%. For localized malignant melanoma, the 5-year relative survival rate is 95%; survival rates for regional and distant disease are 58% and 13%, respectively. About 82% of melanomas are diagnosed at a localized stage.

## Known Risk Factors

- Exposure of the skin to ultraviolet light (sunlight, tanning lights, etc.), especially in childhood.
- Family history of melanoma
- Dysplastic nevus syndrome

## Screening and Early Detection

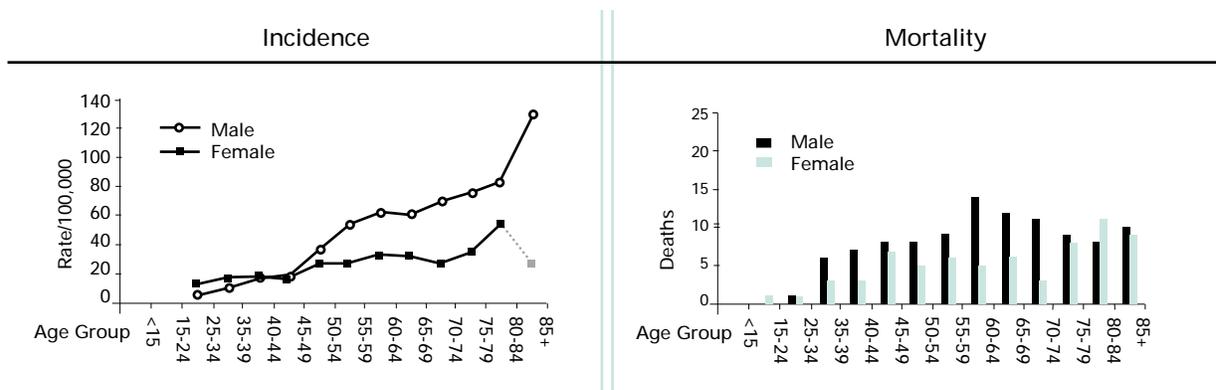
- Regular self and physician examinations of the skin.



42% (95% CI: 38.3-44.9) of NH adults had a sunburn within the past 12 months, and among those, 32% (95% CI: 26.3-36.7) had 3 or more sunburns.

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	124	22.5	23.2	20	4.3	4.4
Total	244	17.8	18.8	40	3.1	3.1

Melanomas of the Skin: Incidence Rates and Mortality by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution. Actual number of events are plotted in place of rates for mortality, there were not enough reliable rates available to produce a meaningful chart.

## Melanomas of the Skin: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

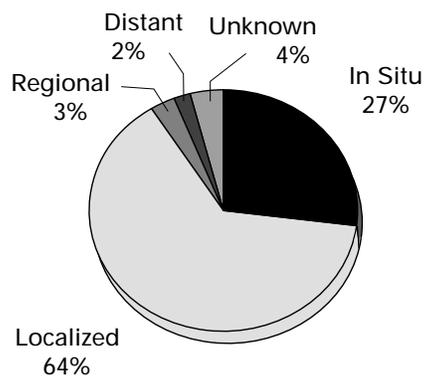
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	0	-	0	-	0	-	0	-	0	-	0	-
15-24	8	-	10	-	18	-	0	-	1	-	1	-
25-34	29	6.4	58	12.4	87	9.4	1	-	1	-	2	-
35-39	33	11.4	48	16.8	81	14.1	6	-	3	-	9	-
40-44	46	17.9	45	17.7	91	17.8	7	-	3	-	10	-
45-49	41	19.1	35	16.8	76	18.0	8	-	7	-	15	-
50-54	64	38.8	44	26.8	108	32.8	8	-	5	-	13	-
55-59	65	54.7	31	25.8	96	40.2	9	-	6	-	15	-
60-64	59	63.0	33	32.9	92	47.4	14	-	5	-	19	-
65-69	60	63.0	34	31.7	94	46.4	12	-	6	-	18	-
70-74	57	71.8	27	27.0	84	46.8	11	-	3	-	14	-
75-79	45	75.9	30	35.9	75	52.5	9	-	8	-	17	-
80-84	30	82.6	32	52.0	62	63.4	8	-	11	-	19	-
85+	30	130.7	17	-	47	55.6	10	-	9	-	19	-

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

## Melanomas of the Skin: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	14	4	18	0	1	1
Carroll	2	5	7	0	1	1
Cheshire	9	10	19	2	2	4
Coos	2	2	4	0	1	1
Grafton	17	14	31	2	0	2
Hillsborough	28	25	53	6	4	10
Merrimack	17	19	36	2	3	5
Rockingham	23	26	49	5	3	8
Strafford	6	8	14	3	3	6
Sullivan	5	8	12	0	2	2
<b>State Total</b>	<b>124</b>	<b>120</b>	<b>244</b>	<b>20</b>	<b>20</b>	<b>40</b>

## Melanomas of the Skin: Stage at Diagnosis, 1999

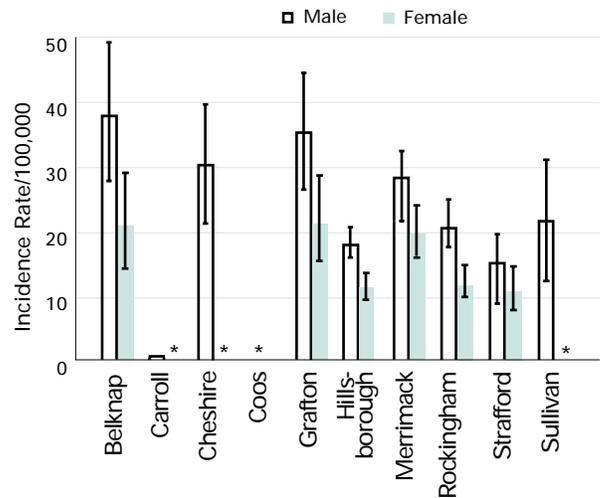


Melanomas of the Skin: Age-adjusted Incidence Rates by Sex and County, 1995-1999

County	Incidence					
	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
Belknap	49	<b>37.3</b>	30	21.0	79	<b>28.6</b>
Carroll	18	-	15	-	33	14.5
Cheshire	52	<b>32.1</b>	24	12.7	76	21.1
Coos	11	-	18	-	29	16.1
Grafton	63	<b>36.4</b>	43	<b>21.4</b>	106	<b>27.7</b>
Hillsborough	136	<b>18.4</b>	109	12.1	245	<b>14.7</b>
Merrimack	78	<b>28.7</b>	67	<b>20.1</b>	145	<b>23.4</b>
Rockingham	108	20.5	84	12.0	192	15.8
Strafford	29	<b>13.6</b>	32	11.8	61	<b>12.1</b>
Sullivan	23	22.8	22	21.1	45	21.8
State Total	567	22.4	444	14.5	1,011	17.8

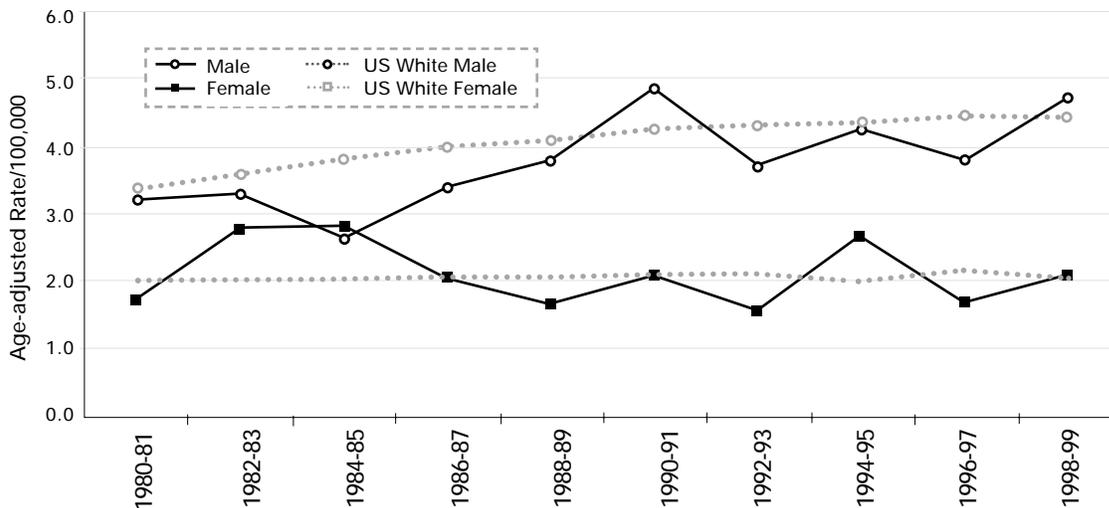
Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates in **bold** type are significantly different from the state rate at the 95% confidence interval. Rates are not displayed if fewer than 20 events were reported (noted as -).

Melanomas of the Skin: Age-adjusted Incidence Rates by Sex and County with 95% Confidence Intervals, 1995-1999



Note: Rates are age-adjusted to the 2000 US standard population. \*Indicates where rates are not displayed because there were fewer than 20 cases reported. — Represents 95% confidence interval. The confidence interval bars can be used to compare the rates in different counties and the rates of each sex within each county. If the bars overlap at any point, the rates are not statistically different. The above chart shows that there are statistically meaningful differences between Belknap (higher than some) and Strafford (lower than some) and some of the other counties.

Melanomas of the Skin: Age-adjusted Mortality Rate Trends by Sex, 1980-1999



Note: Rates are two year averages and are age-adjusted to the 2000 US standard population. The mortality rates are significantly different at the 95% confidence interval between the start and end of the period.

# MULTIPLE MYELOMA

Multiple myeloma is a malignancy of plasma cells, usually originating in bone marrow and mainly affecting the skeleton. The disease is characterized by abnormal accumulations of plasma cells in bone marrow. Multiple myeloma is associated with anemia, hemorrhages, weakness, and infections. Multiple myeloma is a rare disease that accounts for about 1% of all cancers. Age is the most significant risk factor for multiple myeloma. Only 2% of cases are diagnosed in people younger than 40. The average age at diagnosis is about 70.

## Facts

- Age Most Often Affected: 50+
- Gender Most Often Affected: Male
- Survival Information: The 1-year relative survival rate for multiple myeloma is 72%, 28% for 5-year, and 12% for 10-year.

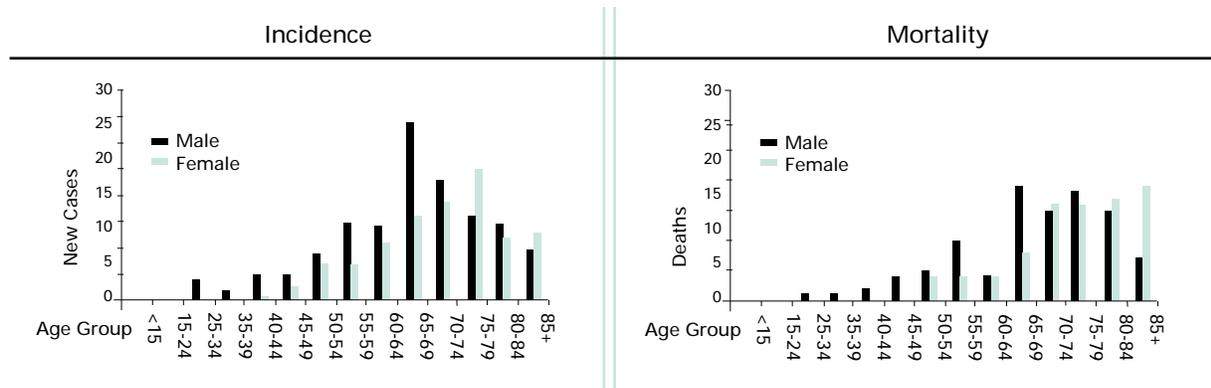
## Known Risk Factors

- Age
- Family member with multiple myeloma

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	33	<b>6.3</b>	6.6	16	4.3	4.6
Female	20	<b>3.7</b>	4.4	17	2.7	3.0
<b>Total</b>	<b>53</b>	<b>4.9</b>	5.3	<b>33</b>	<b>3.5</b>	3.6

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval.

## Multiple Myeloma: Incidence and Mortality by Age and Sex, 1995-1999



Note: Actual number of events are plotted in place of rates; there were not enough reliable rates available to produce a meaningful chart.

Multiple Myeloma: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	0	-	0	-	0	-	0	-	0	-	0	-
15-24	0	-	0	-	0	-	0	-	0	-	0	-
25-34	4	-	0	-	4	-	1	-	0	-	1	-
35-39	2	-	0	-	2	-	1	-	0	-	1	-
40-44	5	-	1	-	6	-	2	-	0	-	2	-
45-49	5	-	3	-	8	-	4	-	0	-	4	-
50-54	9	-	8	-	17	-	5	-	4	-	9	-
55-59	15	-	7	-	22	9.2	10	-	4	-	14	-
60-64	14	-	11	-	25	12.9	4	-	4	-	8	-
65-69	34	35.7	16	-	50	24.7	19	-	8	-	27	13.3
70-74	22	27.7	19	-	41	22.8	15	-	16	-	31	17.3
75-79	16	-	25	29.9	41	28.7	18	-	16	-	34	23.8
80-84	15	-	12	-	27	27.6	15	-	17	-	32	32.7
85+	10	-	13	-	23	27.2	7	-	19	-	26	30.8

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Multiple Myeloma: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	2	2	4	1	3	2
Carroll	2	0	2	3	3	0
Cheshire	2	1	3	1	2	1
Coos	2	0	2	1	2	1
Grafton	1	1	2	1	4	3
Hillsborough	5	7	12	2	5	3
Merrimack	4	2	6	2	4	2
Rockingham	10	3	13	1	3	2
Strafford	3	3	6	3	5	2
Sullivan	2	1	3	1	2	1
State Total	33	20	53	16	33	17

# NON-HODGKIN'S LYMPHOMAS

Lymphoma is a general term for cancers that develop in the lymphatic system. Hodgkin's disease is one type of lymphoma. All other lymphomas are grouped together and are called non-Hodgkin's lymphoma. The incidence of non-Hodgkin's lymphoma has increased dramatically over the last two decades. This disease has gone from being relatively rare to being the fifth most common cancer in the United States. Reasons for this increase are not fully understood, but lymphomas occurring in patients with AIDS are partially responsible.

## Facts

- Age Most Often Affected: All ages, incidence increases with age
- Gender Most Often Affected: Male
- Survival Information: The 1-year survival rate for Non-Hodgkin's lymphoma is 70%, 51% for 5-year, and 41% for 10-year.

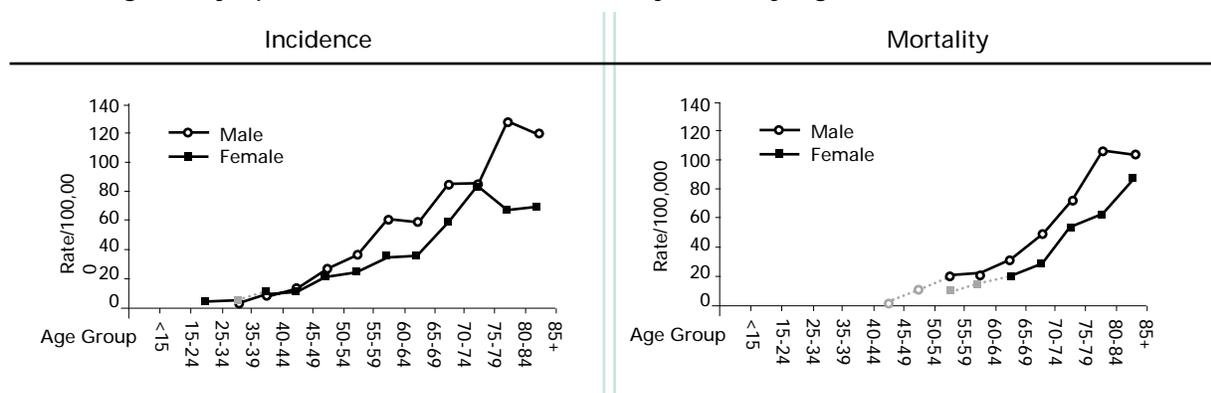
## Known Risk Factors

- Acquired immune disorders
- Exposures to herbicides and chemicals used in agriculture and forestry
- Exposure to Human T-lymphotropic virus type I (HTLV-1) and Epstein-Barr virus

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	100	<b>20.3</b>	23.8	49	11.9	11.4
Female	102	<b>14.5</b>	16.1	40	7.5	7.7
<b>Total</b>	<b>202</b>	<b>17.0</b>	<b>19.6</b>	<b>89</b>	<b>9.5</b>	<b>9.3</b>

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval.

Non-Hodgkin's Lymphomas: Incidence and Mortality Rates by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

## Non-Hodgkin's Lymphomas: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	5	-	5	-	10	-	3	-	2	-	5	-
15-24	10	-	7	-	17	-	3	-	2	-	5	-
25-34	24	5.3	20	4.3	44	4.8	3	-	5	-	8	-
35-39	12	-	13	-	25	4.3	7	-	4	-	11	-
40-44	21	8.2	20	7.9	41	8.0	8	-	4	-	12	-
45-49	30	14.0	21	10.1	51	12.1	11	-	8	-	19	-
50-54	42	25.5	36	21.9	78	23.7	18	-	3	-	21	6.4
55-59	44	37.1	28	23.3	72	30.2	25	21.1	12	-	37	15.5
60-64	56	59.8	35	34.9	91	46.9	21	22.4	14	-	35	18.0
65-69	56	58.8	40	37.3	96	47.4	30	31.5	21	19.6	51	25.2
70-74	70	88.1	61	61.0	131	73.0	40	50.4	29	29.0	69	38.4
75-79	52	87.7	72	86.1	124	86.7	44	74.2	45	53.8	89	62.3
80-84	46	126.6	43	69.9	89	91.0	39	107.4	39	63.4	78	79.7
85+	28	121.9	42	68.3	70	82.8	24	104.5	55	89.4	79	93.5

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

## Non-Hodgkin's Lymphomas: New Cases and Deaths by County, 1999

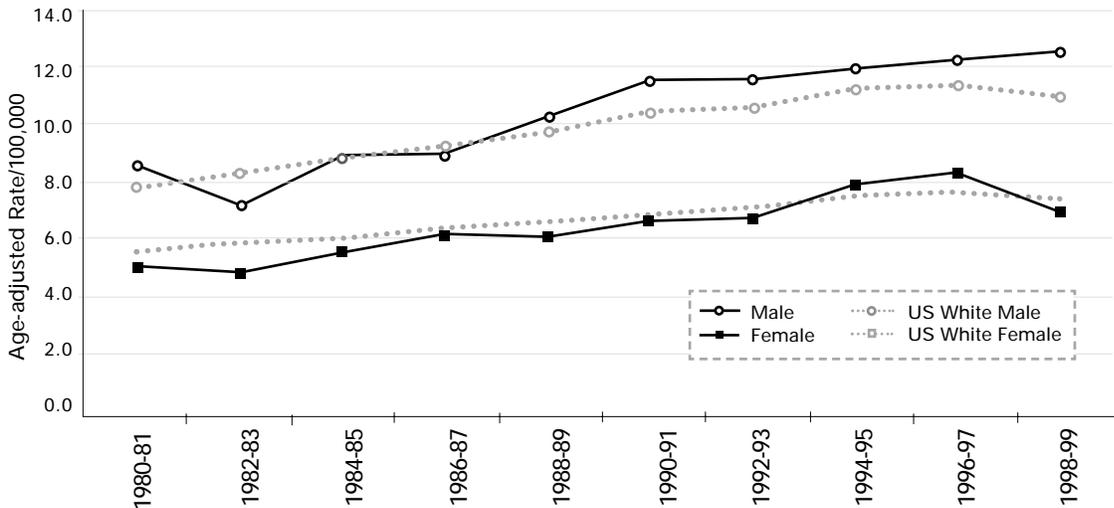
County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap						
Carroll	4	5	9	1	3	4
Cheshire	2	4	6	0	2	2
Coos	9	5	14	4	5	9
Grafton	5	6	11	2	1	3
Hillsborough	13	9	22	4	4	8
Merrimack	23	30	53	19	10	29
Rockingham	15	11	26	10	7	17
Strafford	18	25	43	5	5	10
Sullivan	7	4	11	4	2	6
State Total	4	3	7	0	1	1
	100	102	202	49	40	89

### Non-Hodgkin's Lymphomas: Age-adjusted Incidence and Mortality Rates by Sex and County, 1995-1999

County	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Belknap	23	17.4	25	15.1	48	15.9	12	-	15	-	27	9.0
Carroll	22	23.0	14	-	36	15.8	6	-	8	-	14	-
Cheshire	35	22.0	34	16.6	69	19.0	22	13.9	16	-	38	10.4
Coos	25	27.3	20	17.8	45	21.6	15	-	8	-	23	10.9
Grafton	51	<b>30.2</b>	40	18.7	91	<b>23.8</b>	18	-	14	-	32	8.3
Hillsborough	130	18.7	123	13.9	253	16.2	83	12.8	71	7.8	154	9.9
Merrimack	57	21.6	57	17.3	114	19.2	31	12.7	33	9.0	64	10.4
Rockingham	96	18.3	83	13.5	179	15.6	54	11.7	46	7.5	100	9.3
Strafford	40	19.1	33	12.1	73	14.9	27	13.4	20	6.8	47	9.9
Sullivan	17	-	14	-	31	14.4	8	-	12	-	20	8.6
<b>State Total</b>	<b>496</b>	<b>20.3</b>	<b>443</b>	<b>14.5</b>	<b>939</b>	<b>17.0</b>	<b>276</b>	<b>11.9</b>	<b>243</b>	<b>7.5</b>	<b>519</b>	<b>9.5</b>

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates in **bold** type are significantly different from the state rate at the 95% confidence interval. Rates are not displayed if fewer than 20 events were reported (noted as -).

### Non-Hodgkin's Lymphomas: Age-adjusted Mortality Rate Trends by Sex, 1980-1999



Note: Rates are two year averages and are age-adjusted to the 2000 US standard population. The mortality rates are significantly different at the 95% confidence interval between the start and end of the period.

# ORAL CAVITY AND PHARYNX

Oropharyngeal cancers include those that occur in the lip, tongue, salivary gland, floor of the mouth, and back of the throat (nasopharynx, oropharynx and hypopharynx). The majority of cases are diagnosed on the tongue, lips, and floor of the mouth. During regular check-ups, dentists and primary care physicians can check for abnormal tissue in order to detect oral cancer at early stages.

### Facts

- Age Most Often Affected: Over age 40
- Gender Most Often Affected: Male
- Survival Information: 83% of oropharyngeal cancer patients survive one year after diagnosis. For all stages of disease combined, the 5-year relative survival rate is 53% and the 10-year rate is 46%.

### Known Risk Factors

- Use of tobacco products
- Excessive consumption of alcohol

### Screening and Detection

- Visual inspection through regular dental check-ups and annual physician visits.

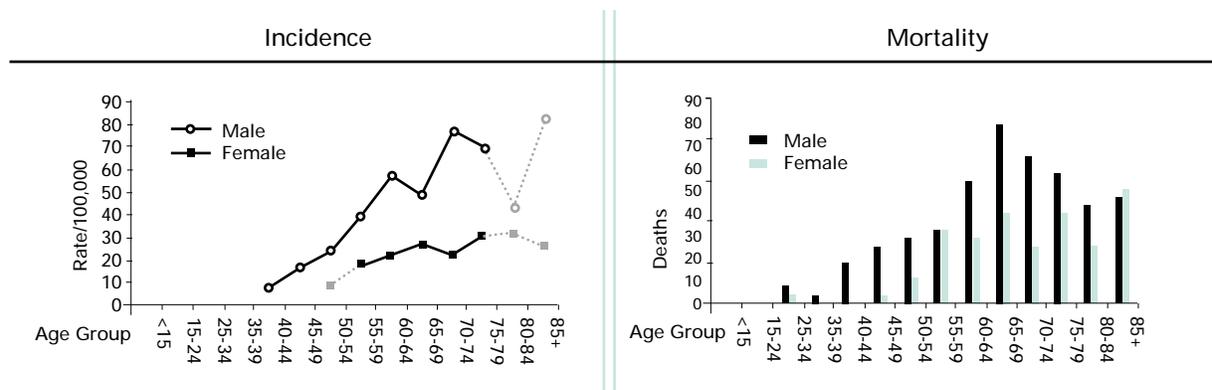


28% (95% CI: 24.6-30.5) of NH adults had not visited a dentist in the past year (1999).

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	81	16.2	16.3	17	<b>5.5</b>	4.2
Female	40	6.6	6.7	11	<b>2.3</b>	1.7
<b>Total</b>	<b>121</b>	<b>10.9</b>	<b>11.0</b>	<b>28</b>	<b>3.7</b>	<b>2.8</b>

Note: New Hampshire rates in bold type are significantly different from national rates at the 95% confidence interval.

Oral Cavity and Pharynx: Incidence Rate and Mortality by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution. Actual number of events are plotted in place of rates for mortality, there were not enough reliable rates available to produce a meaningful chart.

## Oral Cavity and Pharynx: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

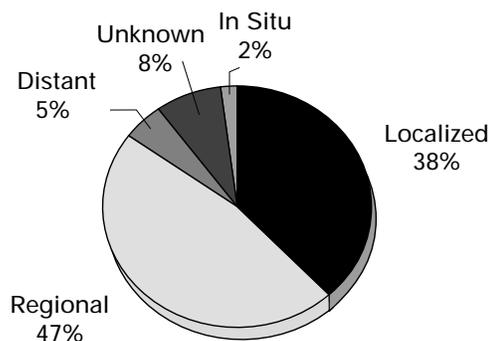
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	2	-	1	-	3	-	0	-	0	-	0	-
15-24	1	-	2	-	3	-	0	-	0	-	0	-
25-34	8	-	6	-	14	-	2	-	1	-	3	-
35-39	6	-	4	-	10	-	1	-	0	-	1	-
40-44	20	7.8	8	-	28	5.5	5	-	0	-	5	-
45-49	37	17.3	9	-	46	10.9	7	-	1	-	8	-
50-54	40	24.3	14	-	54	16.4	8	-	3	-	11	-
55-59	47	39.6	21	17.5	68	28.5	9	-	9	-	18	-
60-64	54	57.7	22	21.9	76	39.2	15	-	8	-	23	11.9
65-69	47	49.3	28	26.1	75	37.0	22	23.1	11	-	33	16.3
70-74	61	76.8	23	23.0	84	46.8	18	-	7	-	25	13.9
75-79	42	70.8	24	28.7	66	46.2	16	-	11	-	27	18.9
80-84	17	-	19	-	36	36.8	12	-	7	-	19	-
85+	19	-	16	-	35	41.4	13	-	14	-	27	32.0

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

## Oral Cavity and Pharynx: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	4	1	5	1	2	3
Carroll	2	2	4	0	1	1
Cheshire	7	5	12	0	1	1
Coos	0	2	2	0	0	0
Grafton	5	3	8	3	0	3
Hillsborough	30	10	40	3	3	6
Merrimack	8	6	14	1	0	1
Rockingham	17	9	26	8	0	8
Strafford	4	1	5	0	4	4
Sullivan	4	1	5	1	0	1
<b>State Total</b>	<b>81</b>	<b>40</b>	<b>121</b>	<b>17</b>	<b>11</b>	<b>28</b>

## Oral Cavity and Pharynx: Stage at Diagnosis, 1999



# OVARY

Overall, ovarian cancer is considered a relatively uncommon type of cancer, however it is the leading cause of death from gynecological cancers in this country. Most ovarian cancers form on the surface of the ovaries. Because no effective screening method is available, periodic, thorough pelvic exams are important.

## Facts

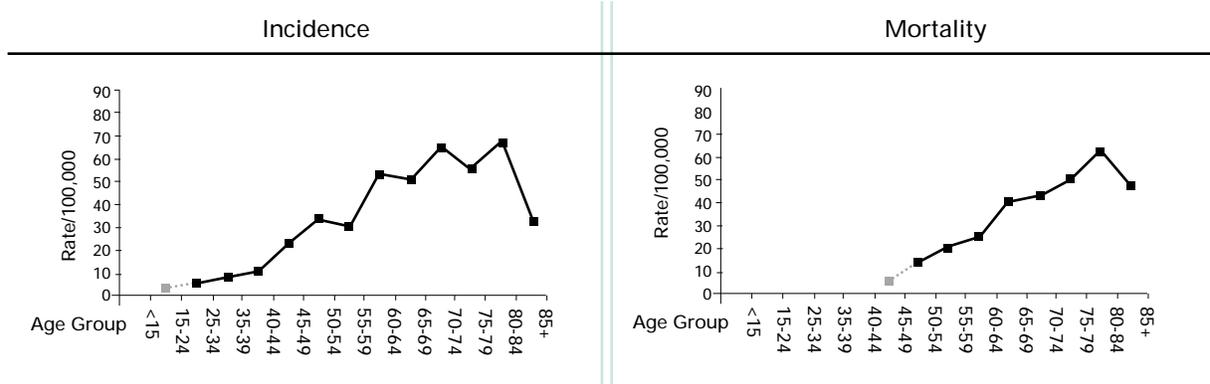
- Age Most Often Affected: 60+, but found in all age groups
- Survival Information: 78% of ovarian cancer patients survive one year after diagnosis; the 5-year relative survival rate for all stages is 50%. If diagnosed and treated early, the survival rate is 95%; however, only about 25% of all cases are detected at the localized stage. Five-year relative survival rates for women with regional and distant disease are 79% and 28%, respectively. .

## Known Risk Factors

- Family history of ovarian cancer
- Cancer of colon, rectum, or breast
- Childlessness
- Fertility drugs

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	87	17.0	17.5	60	9.6	9.3

Ovary: Incidence and Mortality Rates by Age, 1995-1999



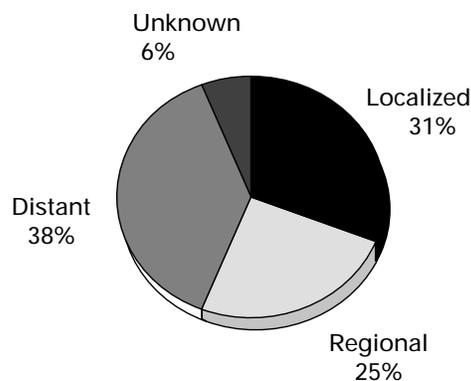
Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

Ovary: Age-specific Incidence and Mortality Rates, 1995-1999

Age Group	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
<15	1	-	0	-
15-24	11	-	0	-
25-34	26	5.6	5	-
35-39	23	8.0	4	-
40-44	26	10.2	6	-
45-49	48	23.0	11	-
50-54	55	33.5	21	12.8
55-59	37	30.8	24	20.0
60-64	53	52.8	25	24.9
65-69	54	50.4	44	41.1
70-74	64	64.0	44	44.0
75-79	48	57.4	43	51.4
80-84	41	66.7	39	63.4
85+	21	34.1	30	48.8

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Ovary: Stage at Diagnosis, 1999



Ovary: New Cases and Deaths by County, 1999

County	New Cases	Deaths
Belknap	5	5
Carroll	2	5
Cheshire	7	5
Coos	6	2
Grafton	6	5
Hillsborough	25	17
Merrimack	9	5
Rockingham	18	11
Strafford	5	3
Sullivan	4	2
<b>State Total</b>	<b>87</b>	<b>60</b>

# PANCREAS

Located behind the stomach, the pancreas is responsible for the production of insulin (to control blood sugar) and digestive juices. It is composed of 2 different types of glands: the exocrine and the endocrine. About 95% of cancers of the exocrine pancreas are adenocarcinomas; these are cancers that grow in the cells lining certain organs. Tumors of the endocrine pancreas are much less common. Cigarette smokers develop this disease two to three times more often than nonsmokers.

## Facts

- Age Most Often Affected: 60+
- Gender Most Often Affected: Both genders
- Survival Information: For all stages combined, the 1-year relative survival rate is 19%; the 5-year rate is 4%.

## Known Risk Factors

- Tobacco use
- Diet high in fat
- Obesity
- Diabetes

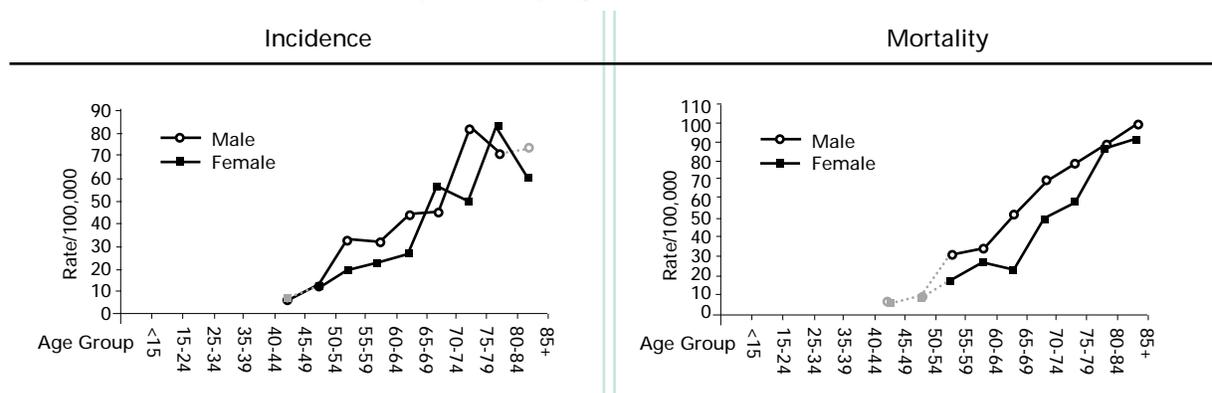


25% (95% CI:23.0-27.7) of NH adults are current smokers.

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997 SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	64	12.1	12.1	72	13.4	12.0
Female	60	9.8	9.3	56	9.5	8.9
<b>Total</b>	<b>124</b>	<b>10.8</b>	<b>10.6</b>	<b>128</b>	<b>11.3</b>	<b>10.3</b>

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval.

## Pancreas: Incidence and Mortality Rates by Age and Sex, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

Pancreas: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

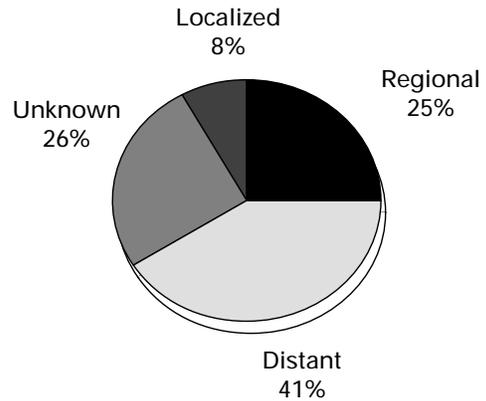
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	0	-	0	-	0	-	0	-	0	-	0	-
15-24	0	-	0	-	0	-	0	-	0	-	0	-
25-34	1	-	0	-	1	-	0	-	0	-	0	-
35-39	2	-	4	-	6	-	2	-	3	-	5	-
40-44	9	-	7	-	16	-	5	-	5	-	10	-
45-49	13	-	13	-	26	6.1	13	-	5	-	18	-
50-54	20	12.1	20	12.2	40	12.2	16	-	11	-	27	8.2
55-59	39	32.8	23	19.2	62	26.0	37	31.2	21	17.5	58	24.3
60-64	30	32.0	23	22.9	53	27.3	32	34.2	26	25.9	58	29.9
65-69	43	45.1	28	26.1	71	35.1	50	52.5	24	22.4	74	36.6
70-74	37	46.6	56	56.0	93	51.8	56	70.5	49	49.0	105	58.5
75-79	49	82.6	41	49.0	90	63.0	47	79.3	48	57.4	95	66.5
80-84	26	71.6	51	82.9	77	78.7	32	88.1	53	86.2	85	86.9
85+	17	-	37	60.1	54	63.9	23	100.2	56	91.0	79	93.5

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Pancreas: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	1	4	5	5	3	8
Carroll	5	0	5	3	0	3
Cheshire	7	3	10	8	3	11
Coos	6	2	8	8	2	10
Grafton	4	8	12	7	6	13
Hillsborough	13	15	28	18	15	33
Merrimack	7	2	9	6	6	12
Rockingham	13	18	31	11	17	28
Strafford	7	4	11	5	1	6
Sullivan	1	4	5	1	3	4
<b>State Total</b>	<b>64</b>	<b>60</b>	<b>124</b>	<b>72</b>	<b>56</b>	<b>128</b>

Pancreas: Stage at Diagnosis, 1999



# PROSTATE

Cancer of the prostate is the most common cancer in men. Between 1989 and 1992, prostate cancer incidence rates increased dramatically, probably due to earlier diagnosis in men without symptoms through better screening, using the PSA blood test.

## Facts

- Age Most Often Affected: 65+
- Survival Information: Seventy-nine percent of all prostate cancers are discovered in the local and regional stages; the 5-year relative survival rate for patients whose tumors are diagnosed at these stages is 100%. Over the past 20 years, the survival rate for all stages combined has increased from 67% to 92%. Survival after a diagnosis of prostate cancer continues to decline beyond five years. According to the most recent data, 67% of men diagnosed with prostate cancer survive 10 years and 52% survive 15 years.



23% (95% CI: 17.5-29.2) of NH males 50 years or older have never had the PSA test.

## Known Risk Factors

- Possibly a diet high in fat
- Family history of prostate cancer
- Race (African American men have the highest prostate cancer incidence rates in the world.)

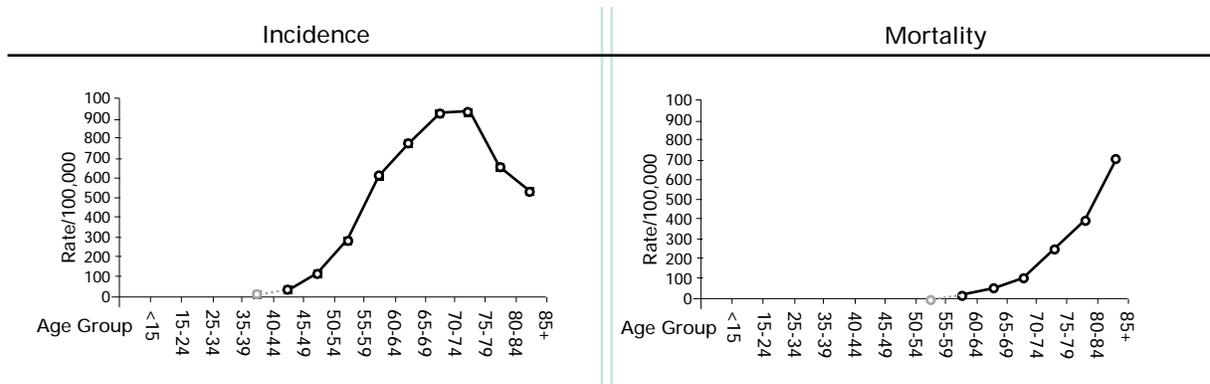
## Screening and Detection

- Digital rectal exam of the prostate gland
- Prostate-specific antigen (PSA) blood test

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	764	<b>150.1</b>	158.9	119	32.5	31.1

Note: New Hampshire rates in **bold** type are significantly different from national rates at the 95% confidence interval

Prostate: Incidence and Mortality Rates by Age, 1995-1999



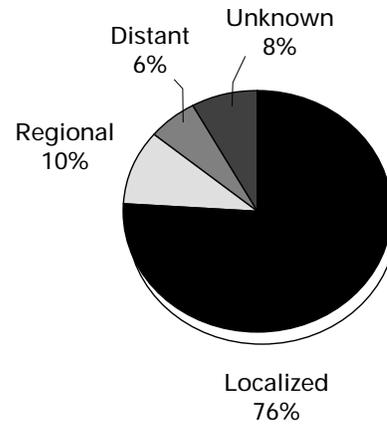
Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

Prostate: Age-specific Incidence and Mortality Rates, 1995–1999

Age Group	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
<15	0	-	0	-
15-24	0	-	0	-
25-34	0	-	0	-
35-39	1	-	0	-
40-44	13	-	2	-
45-49	63	29.4	1	-
50-54	197	119.6	8	-
55-59	346	291.4	10	-
60-64	570	608.6	26	27.8
65-69	739	775.7	59	61.9
70-74	744	936.8	87	109.5
75-79	554	934.3	151	254.7
80-84	248	682.7	145	399.2
85+	126	548.8	163	709.9

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Prostate: Stage at Diagnosis, 1999



Prostate: New Cases and Deaths by County, 1999

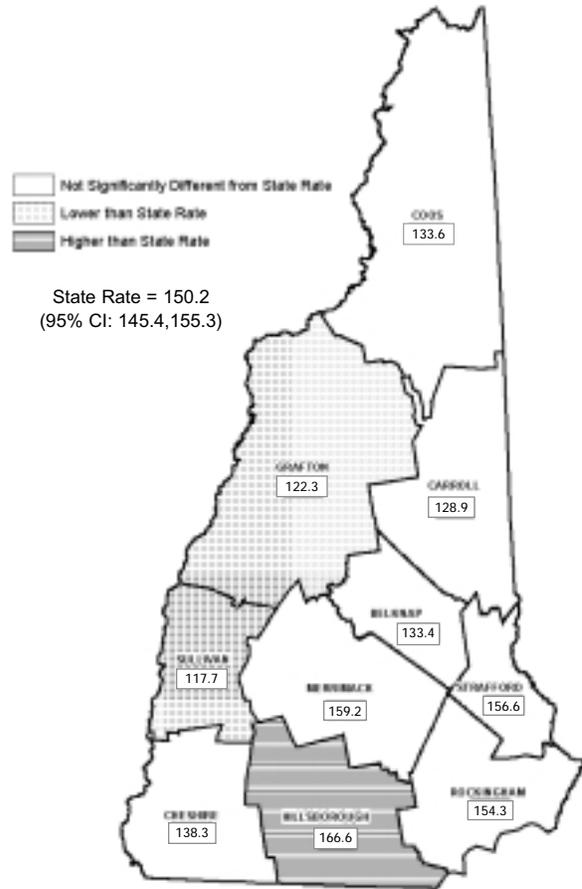
County	New Cases	Deaths
Belknap	43	10
Carroll	31	10
Cheshire	48	9
Coos	26	8
Grafton	43	9
Hillsborough	254	24
Merrimack	90	12
Rockingham	148	14
Strafford	52	13
Sullivan	29	10
<b>State Total</b>	<b>764</b>	<b>119</b>

Prostate: Age-adjusted Incidence and Mortality Rates by County, 1995–1999

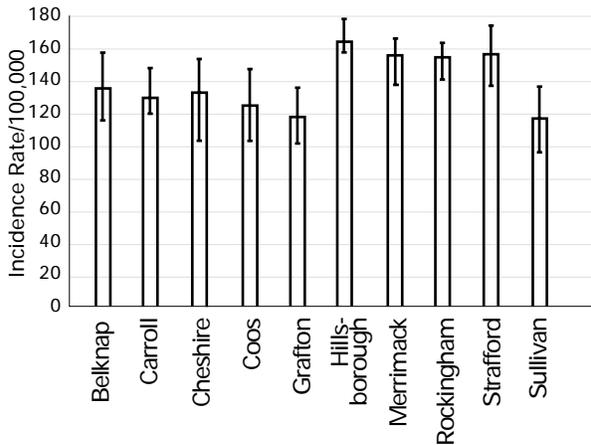
County	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
Belknap	181	133.4	46	38.2
Carroll	153	128.9	34	32.3
Cheshire	223	138.3	48	33.0
Coos	130	133.6	35	40.3
Grafton	214	<b>122.3</b>	44	29.3
Hillsborough	1,091	<b>166.6</b>	159	30.6
Merrimack	406	159.2	65	28.1
Rockingham	754	154.3	116	30.2
Strafford	324	156.6	65	37.2
Sullivan	125	<b>117.7</b>	40	44.7
State Total	3,601	150.2	652	32.5

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates in **bold** type are significantly different from the state rate at the 95% confidence interval.

Prostate: Age-adjusted Incidence Rates by County, 1995–1999

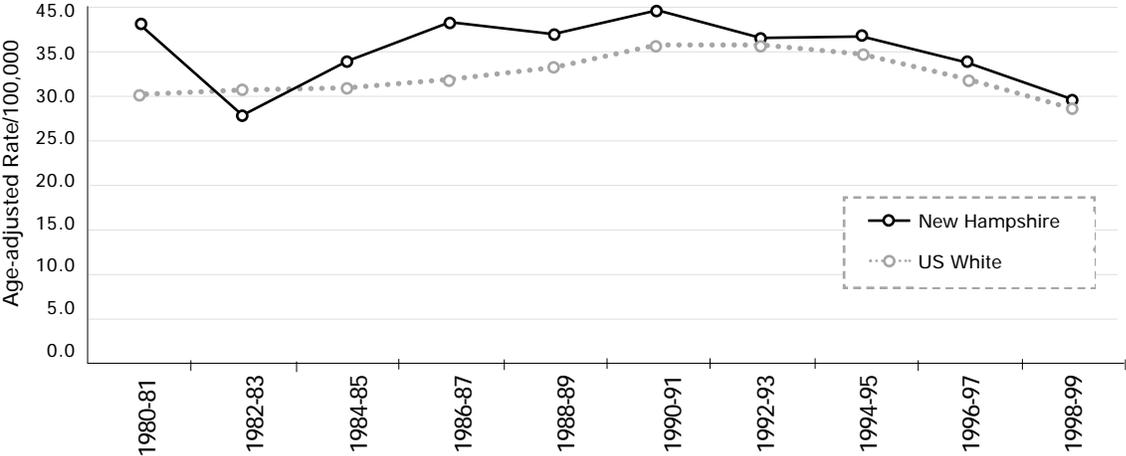


Prostate: Age-adjusted Incidence Rates by County with 95% Confidence Intervals, 1995–1999



Note: Rates are age-adjusted to the 2000 US standard population. ▮ Represents 95% confidence interval. The confidence interval bars can be used to compare the rates in different counties. If the bars overlap at any point, the rates are not statistically different. The above chart shows that there are statistically meaningful differences with Grafton and Sullivan lower than Hillsborough, Rockingham, and Stratford Counties.

Prostate: Age-adjusted Mortality Rate Trend, 1980-1999



Note: Rates are two year averages and are age-adjusted to the 2000 US standard population. The mortality rates are significantly different at the 95% confidence interval between the start and end of the period.

# STOMACH

Stomach cancer incidence and death rates have fallen dramatically in the last 60 years in the US. Early stomach cancer causes few symptoms; which makes early diagnosis difficult. Only 10%-20% of stomach cancers in the U.S. are detected in the early stage when survival rates are highest.

## Facts

- Age Most Often Affected: 50+
- Gender Most Often Affected: Male
- Survival Information: The 5-year survival rate is greater than 90% in stages 0 and I, about 50% in stage II, 15% or less in stage III, and about 3% in stage IV. Most patients diagnosed with stomach cancer in the United States have stage III or stage IV cancers.

## Known Risk Factors

- Diet high in smoked or salted foods containing nitrates and nitrites and low in fresh fruits and vegetables, especially vitamins A and C
- Smoking
- Stomach ulcers

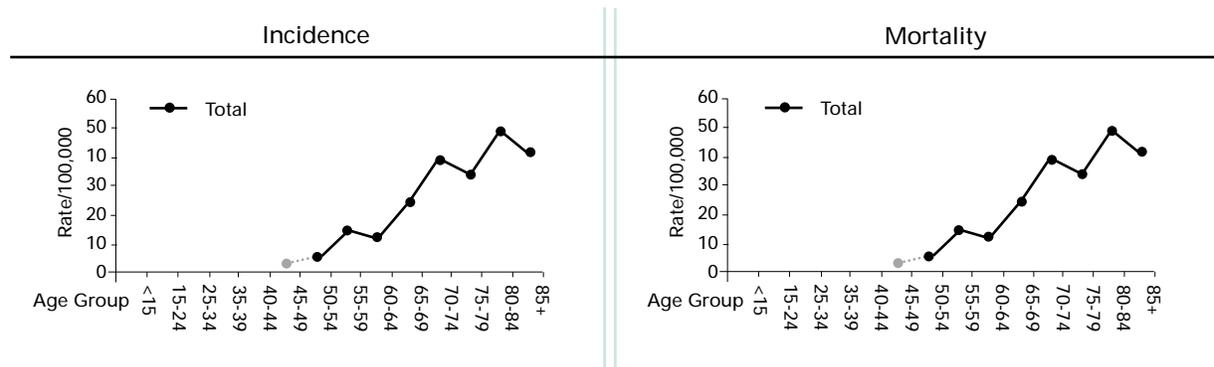


74% (95%CI: 71.6-76.1) of NH adults did not eat five servings of fruits or vegetables a day.

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Female	26	<b>3.6</b>	4.8	18	2.5	3.0
Total	73	<b>6.5</b>	7.5	44	4.3	4.4

Note: New Hampshire rates in bold type are significantly different from national rates at the 95% confidence interval.

## Stomach: Incidence and Mortality Rates by Age, 1995-1999



Note: Rates plotted in gray are based on 10 to 19 events; they are presented to provide continuity and allow some interpretation, but should be relied upon with caution.

Stomach: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

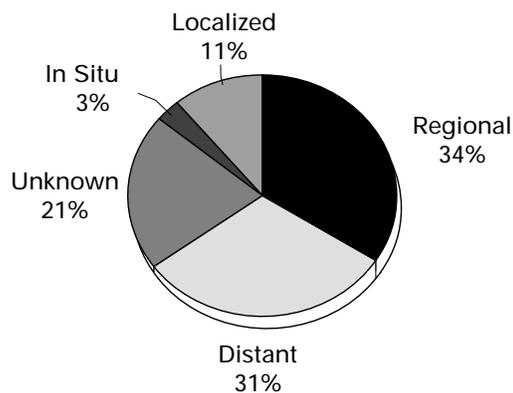
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	0	-	0	-	0	-	0	-	0	-	0	-
15-24	0	-	0	-	0	-	0	-	0	-	0	-
25-34	1	-	2	-	3	-	0	-	0	-	0	-
35-39	7	-	3	-	10	-	2	-	2	-	4	-
40-44	5	-	1	-	6	-	2	-	1	-	3	-
45-49	11	-	3	-	14	-	7	-	2	-	9	-
50-54	14	-	2	-	16	-	8	-	1	-	9	-
55-59	31	26.1	4	-	35	14.7	18	-	1	-	19	-
60-64	15	-	8	-	23	12.4	9	-	1	-	10	-
65-69	40	42.0	9	-	49	24.2	21	22.0	6	-	27	13.3
70-74	48	60.4	22	22.0	70	39.0	29	36.5	16	-	45	25.1
75-79	25	42.2	25	29.9	50	35.0	13	-	16	-	29	20.3
80-84	32	88.1	17	-	49	50.1	24	66.1	16	-	40	40.9
85+	16	-	19	-	35	41.4	20	87.1	21	34.1	41	48.5

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Stomach: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	2	3	5	2	3	5
Carroll	5	0	5	2	0	2
Cheshire	5	5	10	2	3	5
Coos	1	1	2	1	1	2
Grafton	3	0	3	1	1	2
Hillsborough	8	6	14	7	4	11
Merrimack	1	1	2	0	0	0
Rockingham	16	6	22	7	3	10
Strafford	4	3	7	2	2	4
Sullivan	2	1	3	2	1	3
<b>State Total</b>	<b>47</b>	<b>26</b>	<b>73</b>	<b>26</b>	<b>18</b>	<b>44</b>

Stomach: Stage at Diagnosis, 1999



# TESTIS

Testicular cancer represents only one percent of all cancers and about five percent of genital cancers in males. However, it is the most common cancer in young males. Testicular cancer risk has more than doubled among white Americans in the past 40 years but has remained the same for African-Americans.

## Facts

- Age Most Often Affected: 15-35
- Survival Information: Studies show that the cure rate exceeds 90% in all stages combined. The 5-year survival rate for stage I and stage II testicular cancer is more than 95%. The 5-year survival rate for stage III disease, in which cancer has spread beyond local lymph nodes, is 75%.

## Known Risk Factors

- Undescended testicle
- Congenital abnormalities of the testicles
- Maternal exposure to DES before birth

## Screening and Detection

- Self-exams and regular exams by a physician

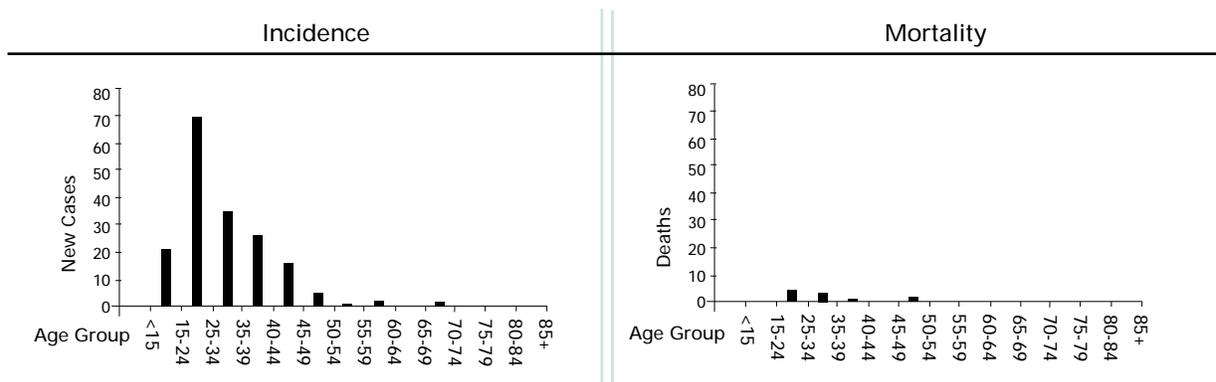


9% (95% CI: 6.4-11.3) of NH adult males had no health insurance; 31% (95% CI: 27.7-35.7) of NH males did not have a routine physical checkup in the past year.

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	39	5.6	6.1	3	-	0.3

Note: Rates are not displayed if fewer than 20 events were reported (noted as -).

Testis: Incidence and Mortality by Age, 1995-1999



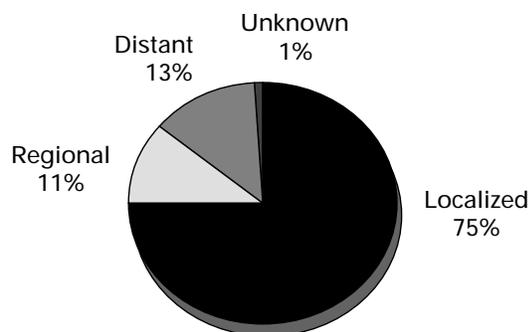
Note: Actual number of events are plotted in place of rates; there were not enough reliable rates available to produce a meaningful chart.

Testis: Age-specific Incidence and Mortality Rates, 1995–1999

Age Group	Incidence		Mortality	
	Cases	Rate	Deaths	Rate
<15	0	-	0	-
15-24	21	5.7	0	-
25-34	70	15.4	4	-
35-39	35	12.1	3	-
40-44	26	10.1	1	-
45-49	16	-	0	-
50-54	5	-	2	-
55-59	0	-	0	-
60-64	2	-	0	-
65-69	0	-	0	-
70-74	2	-	0	-
75-79	0	-	0	-
80-84	1	-	0	-
85+	0	-	0	-

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

Testis: Stage at Diagnosis, 1999



Testis: New Cases and Deaths by County, 1999

County	New Cases	Deaths
Belknap	1	0
Carroll	0	0
Cheshire	1	0
Coos	1	0
Grafton	4	0
Hillsborough	12	2
Merrimack	7	0
Rockingham	11	1
Strafford	2	0
Sullivan	0	0
<b>State Total</b>	<b>39</b>	<b>3</b>

# THYROID

Thyroid cancer is the most common cancer of the endocrine system and accounts for about 1 percent of all cancers. About 10 percent of thyroid nodules (lumps) are cancerous. Most early thyroid cancers are found when patients ask their doctors about nodules they have noticed, but some are also detected by health care providers during routine checkups.

## Facts

- Age Most Often Affected: All ages
- Gender Most Often Affected: Female
- Survival Information: More than 90% of patients treated for papillary or follicular thyroid carcinoma will live for 15 years or longer after diagnosis. For medullary thyroid cancer, over 80% of patients live at least 10 years after surgery. Anaplastic thyroid carcinoma has a much less favorable prognosis: between 3% and 17% of these patients survive five years after diagnosis.

## Known Risk Factors

- Exposure to ionizing radiation, especially during childhood
- History of goiter
- Diet either very low or very high in iodine
- Hereditary factors

## Screening and Detection

- Self-examination and regular annual physician visits

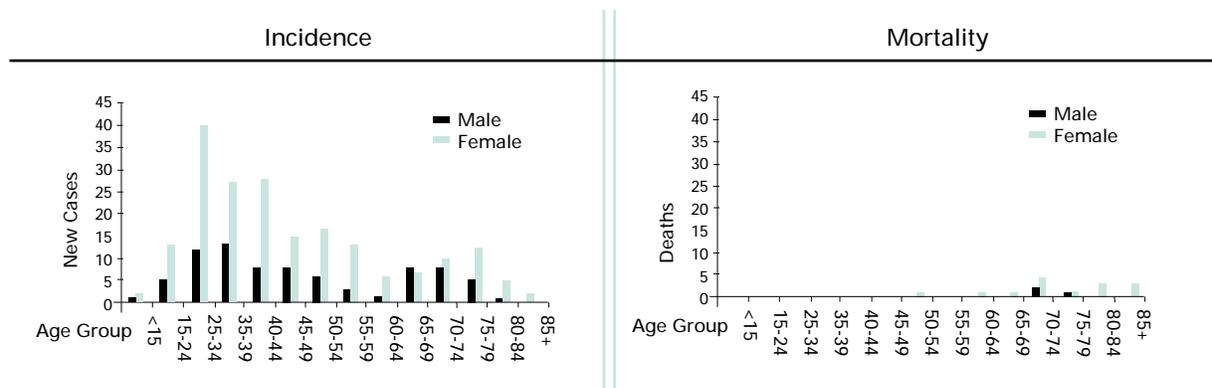


20% (95% CI: 17.3-22.5) of NH women did not have a routine medical checkup during the past year.

	Age-adjusted Incidence Rate/100,000			Age-adjusted Mortality Rate/100,000		
	1999 NH New Cases	1995-1999 New Hampshire	1997SEER U.S. White	1999 NH Deaths	1995-1999 New Hampshire	1997 U.S. White
Male	25	<b>2.7</b>	3.7	1	-	0.5
Female	44	<b>6.5</b>	9.9	5	-	0.5
<b>Total</b>	<b>69</b>	<b>4.7</b>	6.8	6	-	0.5

Note: New Hampshire rates in bold type are significantly different from national rates at the 95% confidence interval. Rates are not displayed if fewer than 20 events were reported (noted as -).

Thyroid: Incidence and Mortality by Age and Sex, 1995-1999



Note: Actual number of events are plotted in place of rates; there were not enough reliable rates available to produce a meaningful chart.

### Thyroid: Age-specific Incidence and Mortality Rates by Sex, 1995-1999

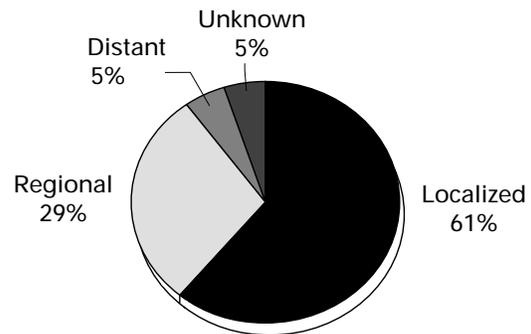
Age Group	Incidence						Mortality					
	Male		Female		Total		Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
<15	1	-	2	-	3	-	0	-	0	-	0	-
15-24	5	-	13	-	18	-	0	-	0	-	0	-
25-34	12	-	40	8.6	52	5.6	0	-	0	-	0	-
35-39	13	-	28	9.8	41	7.1	0	-	0	-	0	-
40-44	8	-	28	11.0	36	7.0	0	-	0	-	0	-
45-49	8	-	16	-	24	5.7	0	-	0	-	0	-
50-54	6	-	17	-	23	7.0	0	-	1	-	1	-
55-59	3	-	13	-	16	-	0	-	0	-	0	-
60-64	1	-	6	-	7	-	0	-	1	-	1	-
65-69	8	-	7	-	15	-	0	-	1	-	1	-
70-74	8	-	10	-	18	-	2	-	4	-	6	-
75-79	5	-	12	-	17	-	1	-	1	-	2	-
80-84	1	-	5	-	6	-	0	-	3	-	3	-
85+	0	-	2	-	2	-	0	-	3	-	3	-

Note: Rates are per 100,000 population and age-adjusted to the 2000 US standard population. Rates are not displayed if fewer than 20 events were reported (noted as -).

### Thyroid: New Cases and Deaths by County, 1999

County	New Cases			Deaths		
	Male	Female	Total	Male	Female	Total
Belknap	0	1	1	0	0	0
Carroll	1	1	2	0	0	0
Cheshire	1	4	5	0	0	0
Coos	1	0	1	0	0	0
Grafton	3	6	9	0	1	1
Hillsborough	11	16	27	1	1	2
Merrimack	1	5	6	0	1	1
Rockingham	6	7	13	0	1	1
Strafford	1	3	4	0	1	1
Sullivan	0	1	1	0	0	0
<b>State Total</b>	<b>25</b>	<b>44</b>	<b>69</b>	<b>1</b>	<b>5</b>	<b>6</b>

### Thyroid: Stage at Diagnosis, 1999



## APPENDIX A: TECHNICAL NOTES

### 1. CHANGE IN STANDARD POPULATION FOR AGE-ADJUSTED RATES

Unlike the 1970 US standard population that was used for age-adjusted rates previously, the 2000 US standard population was used for age-adjusted rates in this report. The 2000 standard population has a higher percentage of individuals in the middle and older age groups than in the 1970 standard population. Because increased age is the greatest risk factor in developing cancer, age distribution in the 2000 standard population better reflects the current age structure. Therefore the age-adjusted rates in this report are expected to be higher and cannot be compared to those in the previous reports.

### 2. TRANSITION FROM ICD-9 TO ICD-10 IN MORTALITY CODING

Vital records departments were required to switch from ICD-9 to ICD-10 for recording cause of death in 1999. ICD-10 is far more detailed than ICD-9 with approximately 3,000 additional codes and is more compatible with the ICD-Oncology (ICD-O) system. Basically, the number of overall cancer deaths using the ICD-9 and the ICD-10 systems are the same. However, causes of death are moved among different categories.

The most notable change in coding of cancer mortality is for lung cancer deaths. Lung cancer is classified as secondary to some other cancers by ICD-10. Therefore, some of the lung cancer deaths classified by ICD-9 were moved to other primary sites in ICD-10. The result is a lower rate of cancer deaths attributed to lung cancer and cannot be concluded as fewer deaths as compared to previous reports.

### 3. DEFINITION OF CANCER TERMS

*Case:* an incident of a reportable primary site of cancer. (Note: a cancer patient may develop multiple primary cancers; therefore, the number of cases in this report refers to the number of reported primary sites, not the number of cancer patients.)

*Site:* the primary organ or tissue of origin for the malignancy. Microscopic examination, endoscopy, radiology, or clinical examination determines the place of origin.

*Stage of disease:* the extent to which the disease has spread from the site of origin at the time of diagnosis. The New Hampshire State Cancer Registry uses the Summary Staging Guide of the Cancer Surveillance, Epidemiology, and End Results Reporting (SEER) Program of NCI. The American College of Surgeons sanctions this guide. It is divided into four general categories that provide a measure of the stage of disease at the time the cancer is first diagnosed. The groupings are general enough so that nearly every case can, with careful consideration, be fitted into one of the groups. These stage categories are defined as follows:

- *In situ:* a noninvasive neoplasm, a tumor that has not penetrated the basement membrane of the epithelial tissue involved.
- *Localized:* an invasive neoplasm confined entirely to the organ of origin.
- *Regional:* a neoplasm that has extended beyond the limits of the organ of origin directly into surrounding organs or tissues and/or into regional lymph nodes by way of the lymphatic system.
- *Distant:* a neoplasm that has spread to other parts of the body remote from the primary tumor either by direct extension or by discontinuous metastasis. A cancer case diagnosed in this stage is classified as late stage diagnosis.

## DEFINITION OF PRIMARY SITE CATEGORIES

Primary Sites	Incidence		Mortality	
	ICD-O2* Topography	ICD-O2 Morphology	ICD-9**	ICD-10**
Bladder	C670-C679	Exclude Type 1 <sup>a</sup>	188.0-188.9	C670-C679
Brain & other CNS	C700-C729	Exclude Type 1 & 2 <sup>b</sup>	191.0-192.9	C700-C729
Breast	C500-C509	Exclude Type 1	174.0-174.9 175	C500-C509
Cervix Uteri	C530-C539	Exclude Type 1	180.0-180.9	C530-C539
Colon/Rectum	C180-C189 C199,C209 C260	Exclude Type 1	153.0-153.9 154.0,154.1 159.0	C180-C189 C19,C20 C26
Corpus Uteri & Uterus, NOS	C540-C549 C559	Exclude Type 1	179 182.0-182.1 182.8	C540-C549 C55
Esophagus	C150-C159	Exclude Type 1	150.0-150.9	C150-C159
Hodgkin's Disease	C000-C809	Type 3 <sup>c</sup>	201.0-201.9	C810-C819
Kidney & Renal Pelvis	C649,C659	Exclude Type 1	189.0,189.1	C64,C65
Larynx	C320-C329	Exclude Type 1	161.0-161.9	C320-C329
Leukemia	C000-C809	Type 4 <sup>d</sup>	202.4,203.1 204.0-208.9	C910-C959
Liver & Intrahepatic Bile Ducts	C220,C221	Exclude Type 1	155.0,155.2	C220-C229
Lung & Bronchus	C340-C349	Exclude Type 1	162.2-162.9	C340-C349
Melanoma of the Skin	C440-C449	Type 5 <sup>e</sup>	172.0-172.9	C430-C439
Multiple Myeloma	C000-C809	Type 6 <sup>f</sup>	203.0 203.2-203.8	C900-C902
Non-Hodgkin's Lymphoma	C000-C809	Type 7 <sup>g</sup>	200.0-200.8 202.0-202.2 202.8-202.9	C820-C859
Oral Cavity & Pharynx	C000-C148	Exclude Type 1	140.0-149.9	C000-C148
Ovary	C569	Exclude Type 1	183.0	C56
Pancreas	C250-C259	Exclude Type 1	157.0-157.9	C250-C259
Prostate	C619	Exclude Type 1	185	C61
Stomach	C160-C169	Exclude Type 1	151.0-151.9	C160-C169
Testis	C620-C629	Exclude Type 1	186.0-186.9	C620-C629
Thyroid	C739	Exclude Type 1	193	C73

- a. Morphology Group Type 1: M-9590-9989.  
b. Morphology Group Type 2: M-9530-9539.  
c. Morphology Group Type 3: M-9650-9667.  
d. Morphology Group Type 4: M-9800-9941.  
e. Morphology Group Type 5: M-8720-8790.  
f. Morphology Group Type 6: M-9731-9732.  
g. Morphology Group Type 7: M-9590-9595 & M-9670-9717.

\*International Classification of Diseases for Oncology, 2nd Ed. (1990) for incidence data

\*\*International Classification of Diseases, Ninth Revision, Clinical Modification (1980) for 1995-1998 mortality data and Tenth Revision, Clinical Modification (2000) for 1999 mortality data.

#### *4. DATA QUALITY*

Data quality is directly related to the completeness and accuracy of the information reported. Registry data tabulated in this report are based on information received and edited by the NHSCR as of January 2002 and reflect at least 95% of the true cancer incidence rate for the state. Delays in reports from out of state hospitals and incomplete medical records account for the balance of the cases.

The NHSCR follows standard procedures for ensuring the accuracy of data. A comprehensive set of standard national edits are applied to all case reports received by the NHSCR prior to including those cases in the central database. New case reports are then merged with old case reports to ensure that only primary incident tumors are included. The NHSCR tumor registrars contact registrars at reporting institutions to resolve any outstanding edits. In addition to these quality assurance activities for case processing, the NHSCR conducts quarterly case reabstraction reviews to ensure that professional standards for case abstraction are consistently met across all reporting institutions. To ensure complete case reporting, the NHSCR performs quarterly independent audits of pathology and cytology reports at hospitals, free standing labs, and selected out of state laboratories performing microscopic reviews for physician offices. In addition, the NHSCR performs death clearance by linking incident cancer cases with vital statistics death certificates and follows up on all deaths with cancer as a diagnosis that were not previously reported to the cancer registry.

#### *5. DATA CONFIDENTIALITY*

All individuals working with the Registry database are governed by the confidentiality policy implemented under the New Hampshire Rules and Regulations governing the Registry. Release of confidential cancer data for research or other purposes is governed by RSA 141B. Data or data analysis may be requested through the Bureau of Health Statistics and Data Management.

#### *6. DATA SOURCES - U.S. INCIDENCE AND MORTALITY*

SEER incidence are derived from National Cancer Institute's SEER Program: SEER Cancer Incidence Public-Use Database, 1973-1998 using SEER Stat.

Statistical information on cancer deaths for the US white population was obtained from the National Mortality Data Base (NMDB) using CDC WONDER provided by the National Center for Health Statistics.

### 7. POPULATION WEIGHTS

State and county population estimates for New Hampshire are based on data from the U.S. Bureau of the Census.

For comparison purposes, the 2000 U.S. standard population weights used in calculating age-adjusted rates in this report and the 1970 U.S. standard population weights used in previous publications are shown below.

Age Group	1970 weight	2000 weight
0-4	0.0844	0.0691
5-9	0.0982	0.0725
10-14	0.1023	0.0730
15-19	0.0938	0.0722
20-24	0.0806	0.0665
25-29	0.0663	0.0645
30-34	0.0562	0.0710
35-39	0.0547	0.0808
40-44	0.0590	0.0819
45-49	0.0596	0.0721
50-54	0.0546	0.0627
55-59	0.0491	0.0485
60-64	0.0424	0.0388
65-69	0.0344	0.0343
70-74	0.0268	0.0318
75-79	0.0189	0.0270
80-84	0.0112	0.0178
85+	0.0074	0.0155
All Ages	1.0000	1.0000

### 8. AGE-ADJUSTED RATES

Age-adjusted rates refer to the number of events that would be expected per 100,000 persons in a selected population if that population had the same age distribution as a standard population. For this report, the standard population used is the U.S. 2000 standard population. Age-adjusted rates allow for comparisons of different population groups by controlling for the effects of differences in age between populations. Age-adjusted rates were calculated using the direct method as follows

$$\hat{R} = \sum_{i=1}^m s_i (d_i / p_i) = \sum_{i=1}^m w_i d_i$$

where,

$m$  = number of age groups

$d_i$  = number of events in age group  $i$

$P_i$  = population in age group  $i$

$S_i$  = proportion of the standard population in age group  $i$

This is a weighted sum of Poisson random variables, with the weights being  $(S_i / P_i)$

### \* Reliability of Rates

Several important notes should be kept in mind when examining rates.

- Rates based on small numbers of events can show considerable variation (e.g. less than 20 events). This limits the usefulness of these rates in comparisons and estimations of future occurrences.
- Unadjusted rates are not reliable for drawing definitive conclusions when making comparisons, because they do not take factors such as age distribution among populations into account. Age-adjusted rates offer a more refined measurement when comparing events over geographic areas or time periods.
- When a difference in rates appears to be significant, care should be exercised in attributing the difference to any particular factor or set of factors. Many variables may influence rate differences. Interpretation of a rate difference requires substantial data and exacting analysis.

### 9. GRAPHS

Graphs have varying scales depending on the range of the data displayed. Therefore, caution should be exercised when comparing such graphs.

### 10. STANDARD ERRORS

The standard errors (S.E.) of the rates were calculated using the following formula:

$$S.E. = \sqrt{\frac{w_j^2 n_j}{p_j^2}}$$

where,

- $w_j$  = fraction of the standard population in age category
- $n_j$  = number of cases in that age category
- $p$  = person-years denominator

### 11. CONFIDENCE INTERVALS (CI)

The standard error can be used to evaluate the statistical significance between two rates by calculating the confidence interval. If the interval produced for one rate does not overlap the interval for another, the probability that the rates are statistically different is 95% or higher. (This test can be inaccurate for rates based on fewer than 10 events.) The formula used is:

$$R \pm z (SE)$$

where,

- R=age-adjusted rate of one population
- z = 1.96 for 95% confidence limits
- SE= standard error as calculated above

## APPENDIX B: SOURCES OF ADDITIONAL INFORMATION

For more information on cancer, risk factors or prevention strategies please refer to the following resources:

- 1-800-4CANCER: A cancer information service of the National Cancer Institute.
- American Cancer Society: <http://www.cancer.org/>
- American College of Surgeons Commission on Cancer: <http://www.facs.org/>
- National Cancer Institute: <http://cancer.gov/>
- National Program of Cancer Registries: <http://www.cdc.gov/cancer/npcr/>
- Surveillance, Epidemiology, and End Results program: <http://seer.cancer.gov/>
- National Cancer Registrars Association: <http://www.ncra-usa.org/>
- North American Association of Central Cancer Registries: <http://www.naaccr.org/>
- International Agency for Research on Cancer, World Health Organization: <http://www.iarc.fr/>
- International Union Against Cancer: <http://www.uicc.org/>
- New Hampshire Behavioral Risk Factor Surveillance System: 603-271-4671
- Healthy New Hampshire 2010: 603-271-4551 or <http://www.healthynh2010.org/>
- New Hampshire Breast and Cervical Cancer Program: 603-271-4931 or <http://www.dhhs.state.nh.us/commpublichealth/bccancer.nsf/vMain?Openview>
- Bureau of Health Risk Assessment, New Hampshire Department of Health and Human Services: 603-271-4664 or <http://www.dhhs.state.nh.us/CommPublicHealth/RiskAssess.nsf/vMain?OpenView>
- Bureau of Health Statistics and Data Management, New Hampshire Department of Health and Human Services: 603-271-5926 or <http://www.dhhs.state.nh.us/healthstats>

## REFERENCES

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- 4 NIH Publications (1996): National Cancer Institute's Racial/Ethnic Patterns of Cancer in the United States, 1988-1992, Bethesda, MD: National Cancer Institute.
- 5 Healthy New Hampshire (HNH) 2010, New Hampshire Department of Health and Human Services.
- 6 Findings from the Behavioral Risk Factor Surveillance System (BRFSS), 2000, New Hampshire Department of Health and Human Services.